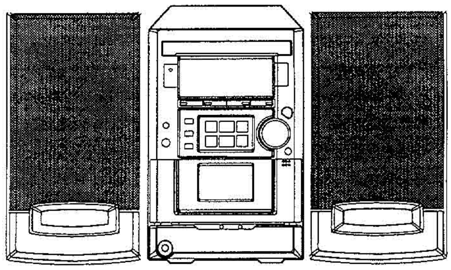
aiwa

aiwa SERVICE

XR-M11
XR-M12
XR-M22
XR-M33
XR-M34
XR-M36



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM-1 R8NM / YR8NM / YR8NC
- BASIC CD MECHANISM : 3ZG-3 E3NM / YE3NM / E2NC
- TYPE: D,HE,HR, LH,EZ,K

製品コード：8ZCL7-0133 (S)
8ZCL7-0137 (S)

SYSTEM	TYPE	TAPE MECHANISM	CD MECHANISM	REMOTE CONTROLLER
XR-M11	D	2ZM-1 YR8NC	3ZG-3 E2NC	RC-ZAT03(VS)
XR-M11	K			RC-ZAT04(VS)
XR-M12	EZ			
XR-M22	HE	2ZM-1 YR8NM	3ZG-3 YE3NM	RC-ZAT04
XR-M22	HR, LH	2ZM-1 YR8NC	3ZG-3 E2NC	RC-ZAT04(VS)
XR-M33	K	2ZM-1 R8NM	3ZG-3 E3NM	RC-ZAT04
XR-M34	EZ			
XR-M36	EZ			

SERVICE MANUAL

S/M Code No. 09-996-400-3R2

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SPECIFICATIONS <D>

本体　XR-M11

チューナー部

<FM部>

受信周波数：　76MHz － 108MHz
アンテナ：　75Ω(不平衡)

<AM部>

受信周波数：　531kHz － 1602kHz
アンテナ：　ループアンテナ

<タイマー部>

プログラムタイマー：　オンタイマー、任意に設定可
スリープタイマー：　5分単位で設定可、最大240分
時計表示：　12時間/24時間表示

アンプ部

定格出力：　10W+10W(1kHz、16Ω、10%) EIAJ

カセットデッキ部

トラック方式：　4トラック2チャンネル
周波数特性：　ノーマルテープ 50 － 15000Hz

CDプレーヤー部

ディスク：　コンパクトディスク
読み取り方式：　非接触光学式読み取り(半導体レーザー使用)
復号化：　1bit デュアル
ワウ　フラッター：　測定限界以下

共通部

電源：　AC 100V、50/60Hz
消費電力：　22W
待機消費電力：　1.3W(省電力モードONのとき)
本体最大外形寸法：　173(幅) × 255.2(高) × 250(奥行) mm
本体質量：　3.5kg

スピーカー　SX-M11

形式：　2ウェイバスレフタイプ
インピーダンス：　16Ω
最大入力：　20W(ミュージックパワー)
出力音圧レベル：　87dB/W/m
使用スピーカー：　ウーハー 12cm　ツイーター 2cm
最大外形寸法：　164(幅) × 255.2(高) × 212(奥行) mm
質量：　1.7kg

- **外観及び仕様は予告なく変更する場合があります。**

SPECIFICATIONS <HE, HR, LH, EZ, K>

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	**11K,12EZ, 33K, 34EZ, 36EZ:** 16.8 dBf **22HE, 22HR, 22LH:** 13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<MW Tuner section> (11K, 12EZ, 33K, 34EZ, 36EZ only)

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<AM Tuner section> (22HE, 22HR only)

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<AM Tuner section> (22LH only)

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<LW Tuner section> (11K, 12EZ, 33K, 34EZ, 36EZ only)

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	**11K, 12EZ:** Rated: 8 W + 8 W (16 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 10 W + 10 W (16 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 16 W + 16 W **33K, 34EZ, 36EZ:** Rated: 12 W + 12 W (8 ohms, T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 15 W + 15 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER: 27.5 W + 27.5 W **22HE, 22HR, 22HR:** 15 W + 15 W (8 ohms, T.H.D. 10 %, 1kHz)
Total Harmonic distortion	**11K,12EZ:** 0.08 % (6.5 W, 1 kHz, 16 ohms, DIN AUDIO) **33K, 34EZ, 36EZ, 22HE, 22HR, 22LH:** 0.08 % (10.5 W, 1 kHz, 8 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 0.4 V
Outputs	**11K,12EZ:** SPEAKERS: accepts speakers of 16 ohms or more PHONES (stereo mini jack): accepts headphones of 32 ohms or more **33K, 34EZ, 36EZ, 22HE, 22HR, 22LH:** SPEAKERS: accepts speakers of 8 ohms or more PHONES (stereo mini jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio	50 dB
Recording system	AC bias
Heads	Recording/playback head X 1 Erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	75 dB (1 kHz, 0 dB)
Harmonic distortion	0.1 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<General>

Power requirements	**11K, 12EZ, 33K, 34EZ, 36EZ:** AC: 230 V, 50 Hz **22HE, 22HR, 22LH:** AC: 120 V/220–240 V, switchable, 50/60 Hz
Power consumption	**11K:** 42 W **12EZ:** 40 W **33K:** 50 W **34EZ, 36EZ, 22HE, 22HR, 22LH:** 45W
Dimensions of main unit (W x H x D)	173 x 255.2 x 250 mm ($6^7/_8$ x $10^1/_8$ x $9^7/_8$ in.)
Weight of main unit	3.5 kg (7 lbs 11 oz.)

<Speaker system>

Cabinet type	**11K,12EZ, 22HE, 22HR, 22LH:** 2 way, bass reflex **33K, 34EZ, 36EZ:** 2 way, bass reflex (magnetic shield type)
Speakers	Woofer: 120 mm ($4^3/_4$ in.) cone type Tweeter: 20 mm ($^{13}/_{16}$ in.) ceramic type
Impedance	**11K, 12EZ:** 16 ohms **33K, 34EZ, 36EZ, 22HE, 22HR, 22LH:** 8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	**11K,12EZ, 22HE, 22HR, 22LH:** 164 x 255.2 x 212 mm ($6^1/_8$ x 10 x $8^3/_4$ in.) **33K, 34EZ, 36EZ:** 173 x 255 x 195 mm ($6^7/_8$ x 10 x $7^3/_4$ in.)
Weight	**11K,12EZ, 22HE, 22HR, 22LH:** 1.7 kg (3 lbs 12 oz.) **33K, 34EZ, 36EZ:** 1.9 kg (4 lbs 3 oz.)

- Design and specifications are subject to change without notice.

製品を安全に修理（補修）するために

修理の前に「製品を安全に修理（補修）するために」をよくお読みの上、正しく修理を行ってください。このサービスマニュアルでは、お客様が製品を安全に正しくお使いいただき、お客様や他の人々への危害や財産への損害を未然に防止するために、修理する場合必ず下記の項目をお守りください。

⚠警告

警告に示された次の内容を必ずお守りください。
もし守られないと、火災や感電、けがなどの重度の損害を負う原因となります。

1.⚠安全規格部品注意文
製品の安全性を維持する為の重要部品で、安全上特別な規格で作られています。このマークの部品を交換する時は必ず指定の部品を使用してください。

2.指定部品を使用すること。
セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用してください。特に回路図、部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

3.電源コードを含むＡＣ1次側のリード線の被覆を傷つけたり、溶かしたりしないこと。

4.感電に注意すること。
内部には高電圧の部分がありますので通電時の取り扱いに際しては注意してください。

5.次の各項目は必ず修理前と同じ状態にすること。
1）ワイヤーの半田付け状態（特にＡＣ1次側の空間距離）
2）ワイヤーの引き回しおよび束線状態等
3）ワイヤーの種類
4）各種絶縁物の取付状態

6.部品の取り付けや配線の引き回しはもとどおりにすること。
安全上、チューブやテープなどの絶縁材料を使用したり、プリント基板から浮かしてとりつけた部品があります。また、内部配線は引き回しやクランパーによって発熱部品や高圧部品に接近しないよう配慮されていますのでこれらは必ずもとどおりにしてください。

⚠注意

この表示を無視して、誤った取り扱いをすると、人が傷害を負ったり物的損害が発生する可能性があります。

1.注意事項を守ること。
サービスの時、特に注意を要する箇所については、キャビネット、シャーシ、部品などにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書等の注意事項を必おず守りください。

2.スペック銘板・注意ラベル・ヒューズラベル等の表示文字を汚して読みにくくしないこと。

3.基板パターンの裏付け部品の修理等を行う場合、パターンや部品に指定のボンドを塗布してプリント基板にしっかり固定すること。

4.サービス後は安全点検すること。
サービスのために取り外したネジ、部品、配線がもとどおりになっているか、サービスした個所の周辺で劣化させてしまったところがないかなどを点検してください。（ワイヤー半田付け、引き回し、束線、種類、空間距離）

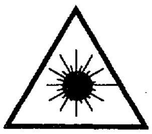
5.修理（補修）時に、レーザー出力部に接近しないこと。
やむなく接近する場合は、目を閉じてください。レーザービームに接近することが必要になった場合、光学ピックアップブロックの対物レンズの表面から30cm以上離れていることを確認してください。

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

光学ブロック交換時の注意
(KSS – 213F)

光学系ブロック内のレーザーダイオードは、衣服や人体に帯電した静電荷等で電位差を生じることにより、静電破壊することがあります。人体アース、作業台のアースをとり、衣服が触れぬよう注意して下さい。

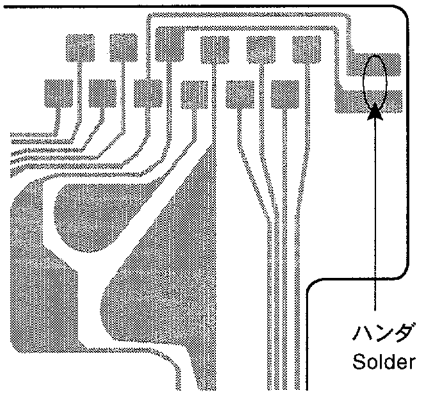
1）コネクターを接続後、右図に示すハンダ付けを取り除いて下さい。

Precaution to replace Optical block
(KSS – 213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

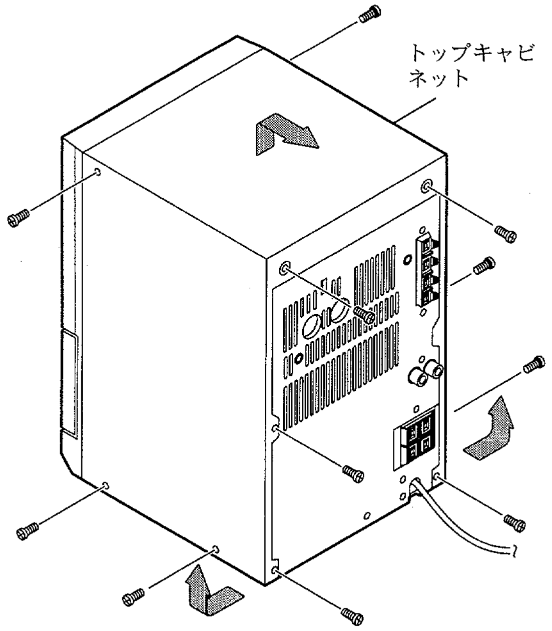
PICK-UP Assy P.C.B



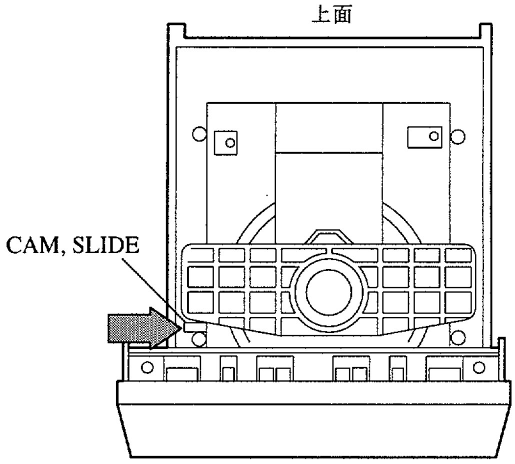
DISASSEMBLY INSTRUCTIONS <D>

(A) トップキャビネットの取り外し

1. キャビネットの両側から６つのビスをはずす。
2. 後部から、５つのビスをはずす。
3. 矢印の方向へトップキャビネットをはずす。

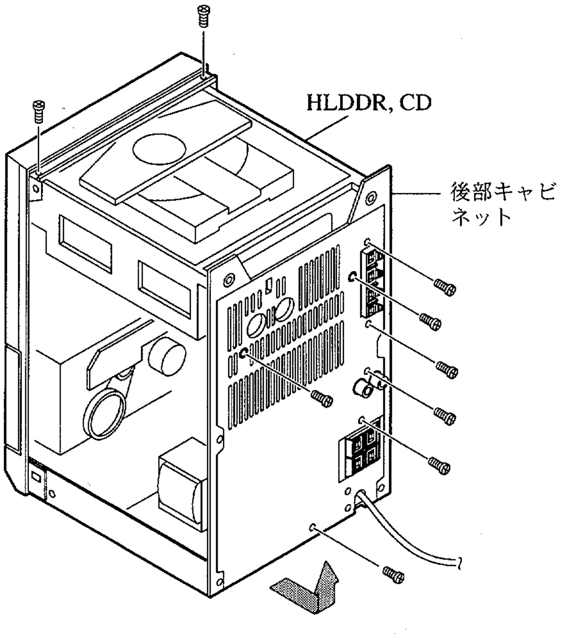


3. CDトレイを開けて、トレイパネルをはずす。CDトレイを開けるには、CAM. SLIDEを矢印のとおり内側に押す。

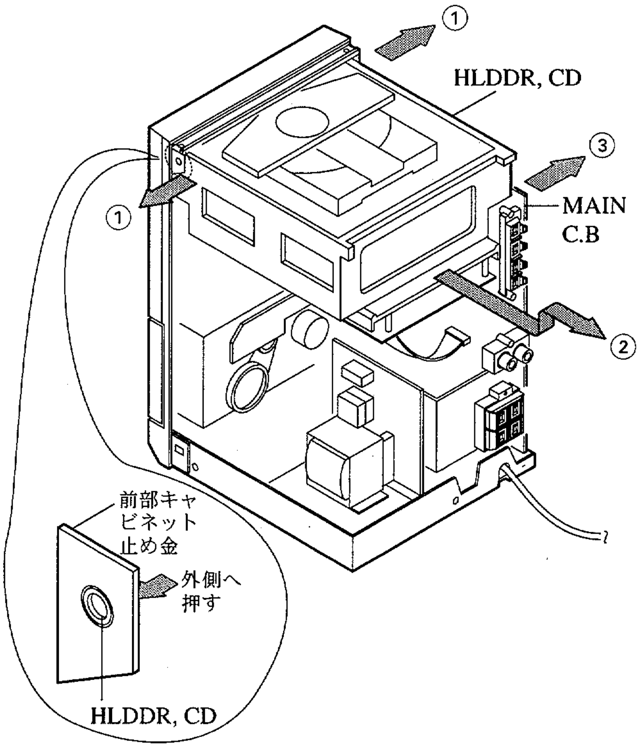

上面
CAM, SLIDE

(B) CD部の取り外し

1. 後部キャビネットについている全てのビスを取り外し、矢印の方向に後部キャビネットをはずす。
2. HLDR. CDのトップから２つのビスをはずす。


HLDDR, CD
後部キャビネット

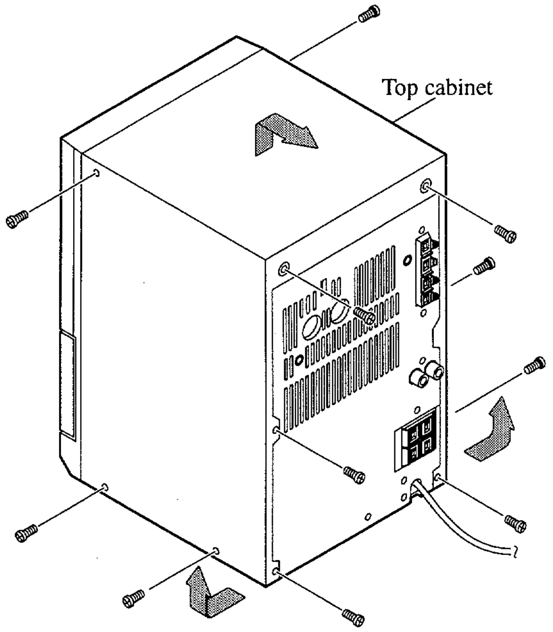
4. 前部キャビネットの止め金を矢印①の方向にあるように外側へ押し、両側にあるHLDR. CDを取り外す。
   ＊ 注意 ：取り外し作業中、CDケーブルに注意すること。
5. HLDR. CDを、矢印②の通りに取り外す。
   ＊ 注意 ：MAIN C.Bを矢印③の方向へ引くと、簡単にはずれる。


①
HLDDR, CD
③
①
MAIN C.B
②
前部キャビネット止め金
外側へ押す
HLDDR, CD

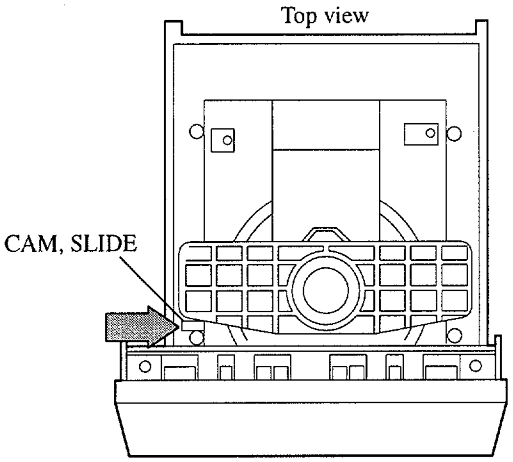
DISASSEMBLY INSTRUCTIONS <HE, HR, LH, EZ, K>

(A) HOW TO REMOVE THE TOP CABINET

1. Remove 6 screws from both sides of the cabinet.
2. Remove 5 screws from the rear.
3. Remove the top cabinet in the direction of arrows.

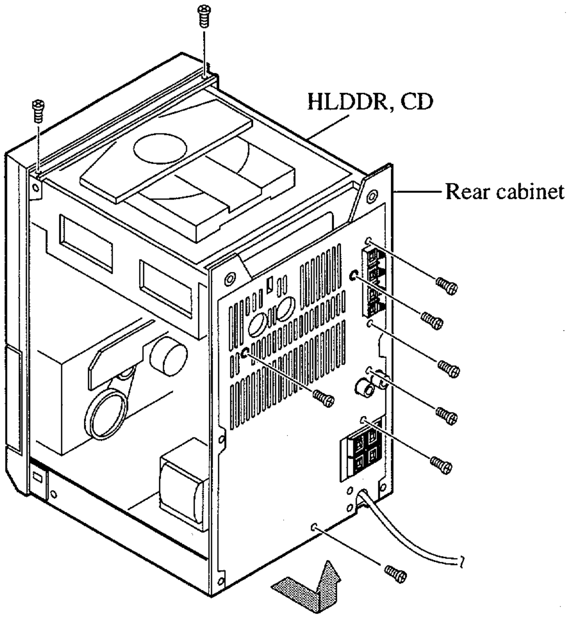

Top cabinet

3. Open the CD tray to remove its tray panel.To open the CD tray, push the CAM, SLIDE inwards as shown by the arrow

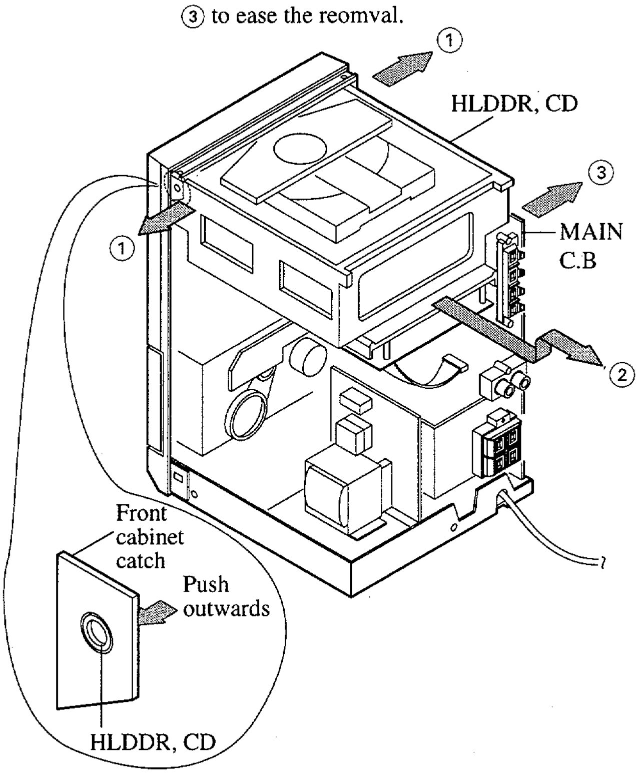

Top view
CAM, SLIDE

(B) HOW TO REMOVE THE CD SECTION

1. Remove all the screws on the rear cabinet and remove the rear cabinet in the direction of the arrow
2. Remove 2 screws from the top of the HLDR, CD.


HLDDR, CD
Rear cabinet

4. Push the catch of the front cabinet outwards int the direction of arrows① to remove the HLDR, CD on both sides.
   * Caution: During the removal, ensure the CD cables are stree-free.
5. Remove the HLDR, CD as shown in arrow② .
   * Caution: Push the MAIN C.B as indicated by the arrow ③ to ease the reomval.


①
HLDDR, CD
③
MAIN C.B
①
②
Front cabinet catch
Push outwards
HLDDR, CD

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-446-010	1E	C-IC,LA9241ML
	87-020-454-010	--	IC,DN6851
	87-A20-459-010	2A	C-IC,LC78622ED
	87-A20-157-010	1E	IC,TA2092N
	87-020-903-010	1B	IC,NJM7805FA
	87-001-982-010	1B	IC,TA7291S
	8Z-CL7-685-010		C-IC,M38B57MCH-P226F<HE>
	8Z-CL7-683-010	1H	C-IC,M38B57MC-P218FP<EXCEPT HE>
	87-017-889-010	1A	IC,NJM4558LD
	87-A20-914-010	1B	IC,SPS-442-1-F
	87-A20-946-040	1D	C-IC,MM1434XF
	87-A21-111-040	1C	C-IC,M62495FP
	87-070-127-110	1C	IC,LC72131D
	87-A20-913-010	1D	IC,LA1837NL
	87-070-060-040	1F	C-IC,TA2040AF<D>
	87-A20-440-040		C-IC,BU1920FS<EZ>
TRANSISTOR			
	87-026-463-080	0E	TR,2SA933S(RS)
	87-026-297-080	0E	C-TR,DTA144TK
	87-026-223-080	0E	C-TR,DTC143TK
	89-109-521-080	0E	TR,2SA952K
	89-318-155-080	0E	TR,2SC1815
	87-026-610-080	0E	TR,KTC3198GR
	89-213-702-010	1A	TR,2SB1370E
	89-333-317-080	0E	TR,2SC3331T
	87-A30-196-080	0E	TR,2SC4115SRS
	89-113-187-080	0E	TR,2SA1318TU
	87-A30-198-080	0E	TR,KTC3199GR
	87-A30-197-080	0E	TR,KTA1267GR
	87-026-219-080	0E	TR,DTA144ES
	87-A30-127-010	1A	TR,2SD2478
	87-A30-126-010	1A	TR,2SB1616
	89-406-555-080	0E	TR,2SD655E
	87-026-609-080	0E	TR,KTA1266GR
	87-026-245-080	0E	TR,DTC114ES
	89-112-965-080	0E	TR,2SA1296GR
	89-327-125-080	0E	C-TR,2SC2712GR
	87-A30-090-080	0E	FET,2SK2541
	89-111-624-080	0E	C-TR,2SA1162Y
	87-026-235-080	0E	C-TR,DTC114EK
	87-026-502-080	0E	TR,DTC144TS
	89-327-143-080	0E	C-TR,2SC2714(O)
	87-A30-072-080	0E	C-TR,RT1P144C
	87-026-226-080	0E	C-TR,DTA143EK<D>
	87-A30-039-040	0E	C-TR,2SD1383K<D>
	87-A30-076-080		C-TR,2SC3052F<EZ>
	89-505-434-540		C-FET,2SK543(4/5)<EZ,K>
	87-A30-074-080		C-TR,RT1P141C<EZ,K>
	87-A30-257-080		C-TR,2SD1306E<EZ,K>
DIODE			
	87-020-465-080	0E	DIODE,1SS133
	87-020-027-080	0E	C-DIODE,1SS184
	87-A40-535-080		DIODE,1N5393<33K,34EZ,36EZ>
	87-A40-454-080	0E	DIODE,1N5393<EXCEPT 33K,34EZ,36EZ>
	87-A40-553-080	0E	DIODE,1N4003 LES
	87-A40-341-080	0E	ZENER,MTZJ 36 A
	87-A40-345-080	0E	ZENER,MTZJ10C
	87-017-931-080	0E	ZENER,MTZJ5.6B
	87-020-125-080	0E	DIODE,1SS181
	87-A40-523-080	0E	ZENER,MTZJ9.1B
	87-A40-466-080	0E	ZENER,MTZJ2.7A
	87-A40-234-080	0E	ZENER,MTZJ5.6A
	87-A40-270-080		C-DIODE,MC2838<EZ,K>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
MAIN C.B			
C101	87-016-495-090	1B	CAP,E 3300-25 SMG
C102	87-010-197-080	0E	CAP,CHIP 0.01 DM
C104	87-A10-011-090	2A	CAP,E 2200-25 SMG
C105	87-012-140-080	0E	CAP,470P
C106	87-010-408-080	0E	CAP,ELECT 47-50V
C107	87-010-384-080	0E	CAP,ELECT 100-25V
C108	87-010-381-080	0E	CAP,ELECT 330-16V
C109	87-010-260-080	0E	CAP,ELECT 47-25V
C110	87-010-260-080	0E	CAP,ELECT 47-25V
C111	87-010-247-080	0E	CAP,ELECT 100-50V
C112	87-010-263-080	0E	CAP,ELECT 100-10V
C113	87-010-403-080	0E	CAP,ELECT 3.3-50V
C114	87-010-374-080	0E	CAP,ELECT 47-10V
C115	87-A10-303-080		CAP,M 0.047-50 J<33K,34EZ,36EZ>
C115	87-A11-007-080	0E	CAP,M 0.047<EXCEPT 33K,34EZ,36EZ>
C116	87-A10-303-080		CAP,M 0.047-50 J<33K,34EZ,36EZ>
C116	87-A11-007-080	0E	CAP,M 0.047<EXCEPT 33K,34EZ,36EZ>
C122	87-010-260-080	0E	CAP,ELECT 47-25V
C123	87-010-260-080	0E	CAP,ELECT 47-25V
C131	87-012-368-080	0E	C-CAP,S 0.1-50 ZF
C132	87-012-368-080	0E	C-CAP,S 0.1-50 ZF
C151	87-015-785-080	0E	CHIP CAPACITOR,0.1FZ-25Z
C200	87-010-197-080	0E	C-CAP,S 0.01-25 KB
C201	87-010-197-080	0E	C-CAP,S 0.01-25 KB
C207	87-010-546-080	0E	CAP,ELECT 0.33-50V
C208	87-010-546-080	0E	CAP,ELECT 0.33-50V
C209	87-010-186-080	0E	CAP,CHIP 4700P
C210	87-010-186-080	0E	CAP,CHIP 4700P
C211	87-010-403-080	0E	CAP,ELECT 3.3-50V
C212	87-010-403-080	0E	CAP,ELECT 3.3-50V
C213	87-010-260-080	0E	CAP,ELECT 47-25V
C214	87-010-260-080	0E	CAP,ELECT 47-25V
C219	87-010-544-080	0E	CAP,ELECT 0.1-50V
C220	87-010-544-080	0E	CAP,ELECT 0.1-50V
C221	87-010-189-080		C-CAP,S 8200P-50 KB<EZ,K>
C222	87-010-189-080		C-CAP,S 8200P-50 KB<EZ,K>
C227	87-010-260-080	0E	CAP,ELECT 47-25V
C229	87-012-156-080	0E	C-CAP,S 220P-50 CH
C230	87-012-156-080	0E	C-CAP,S 220P-50 CH
C261	87-010-197-080	0E	CAP,CHIP 0.01 DM
C273	87-010-196-080	0E	C-CAP,S 0.1-25 ZF
C274	87-010-145-080		C-CAP,S 270P-50 J CH GRM<EZ,K>
C275	87-010-145-080		C-CAP,S 270P-50 J CH GRM<EZ,K>
C276	87-010-178-080		C-CAP,S 1000P-50 KB<EZ,K>
C303	87-010-177-080	0E	C-CAP,S 820P-50 SL
C304	87-010-177-080	0E	C-CAP,S 820P-50 SL
C307	87-010-263-080	0E	CAP,ELECT 100-10V
C308	87-010-263-080	0E	CAP,ELECT 100-10V
C311	87-010-195-080	0E	C-CAP,S 0.068-25 F
C312	87-010-195-080	0E	C-CAP,S 0.068-25 F
C313	87-010-184-080	0E	CHIP CAPACITOR,3300P(K)
C314	87-010-184-080	0E	CHIP CAPACITOR,3300P(K)
C315	87-010-374-080	0E	CAP,ELECT 47-10V
C317	87-010-546-080	0E	CAP,ELECT 0.33-50V
C318	87-010-546-080	0E	CAP,ELECT 0.33-50V
C321	87-010-405-080	0E	CAP,ELECT 10-50V
C340	87-012-156-080	0E	C-CAP,S 220P-50 CH
C349	87-010-322-080		C-CAP,S 100P-50 J CH GRM<EZ,K>
C350	87-010-322-080		C-CAP,S 100P-50 J CH GRM<EZ,K>
C361	87-010-374-080	0E	CAP,ELECT 47-10V
C362	87-010-401-080	0E	CAP,ELECT 1-50V
C386	87-010-197-080		C-CAP,S 0.01-25 KB<EZ,K>
C393	87-010-178-080		C-CAP,S 1000P-50 KB<EZ,K>
C394	87-010-178-080		C-CAP,S 1000P-50 KB<EZ,K>
C401	87-010-401-080	0E	CAP,ELECT 1-50V
C402	87-010-401-080	0E	CAP,ELECT 1-50V
C403	87-010-321-080	0E	CHIP CAPACITOR,82P(J)
C404	87-010-321-080	0E	CHIP CAPACITOR,82P(J)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C405	87-010-188-080	0E	CAP,CHIP 6800P
C406	87-010-188-080	0E	CAP,CHIP 6800P
C407	87-010-426-080	0E	C-CAP,S 0.012-25 B
C408	87-010-426-080	0E	C-CAP,S 0.012-25 B
C451	87-010-198-080	0E	CAP,CHIP 0.022
C452	87-010-382-080	0E	CAP,ELECT 22-25V
C453	87-010-183-080	0E	C-CAP,S 2700P-50 B
C454	87-010-183-080	0E	C-CAP,S 2700P-50 B
C455	87-010-183-080	0E	C-CAP,S 2700P-50 B
C456	87-010-197-080	0E	CAP,CHIP 0.01 DM
C457	87-A10-292-080		CAP,M 5600P-50 J<33K,34EZ,36EZ>
C457	87-A10-772-080	0E	CAP,M 5600P<EXCEPT 33K,34EZ,36EZ>
C458	87-010-178-080	0E	CHIP CAP,1000P<D,HE,HR,LH>
C458	87-010-178-080		C-CAP,1000P-50 KB<EZ,K>
C459	87-010-175-080	0E	CAP,560P
C461	87-012-158-080	0E	C-CAP,S 390P-50 CH
C462	87-012-158-080	0E	C-CAP,S 390P-50 CH
C526	87-010-112-080	0E	CAP,ELECT 100-16V
C527	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C528	87-010-374-080	0E	CAP,ELECT 47-10V
C529	87-010-401-080	0E	CAP,ELECT 1-50V
C530	87-010-401-080	0E	CAP,ELECT 1-50V
C531	87-010-405-080	0E	CAP,ELECT 10-50V
C532	87-010-402-080	0E	CAP,ELECT 2.2-50V
C533	87-A10-295-080		CAP,M 0.01-50 J<33K,34EZ,36EZ>
C533	87-A10-999-080	0E	CAP,M 0.01<EXCEPT 33K,34EZ,36EZ>
C534	87-A10-295-080		CAP,M 0.01-50 J<33K,34EZ,36EZ>
C534	87-A10-999-080	0E	CAP,M 0.01<EXCEPT 33K,34EZ,36EZ>
C535	87-A10-295-080		CAP,M 0.01-50 J<33K,34EZ,36EZ>
C535	87-A10-999-080	0E	CAP,M 0.01<EXCEPT 33K,34EZ,36EZ>
C536	87-A10-295-080		CAP,M 0.01-50 J<33K,34EZ,36EZ>
C536	87-A10-999-080	0E	CAP,M 0.01<EXCEPT 33K,34EZ,36EZ>
C537	87-010-546-080	0E	CAP,ELECT 0.33-50V
C538	87-010-546-080	0E	CAP,ELECT 0.33-50V
C601	87-010-180-080	0E	C-CAP,S 1500P BK
C602	87-010-180-080	0E	C-CAP,S 1500P BK
C603	87-010-322-080	0E	C-CAP,S 100P-50 CH
C609	87-010-213-080	0E	C-CAP,S 0.015-50 B
C610	87-010-213-080	0E	C-CAP,S 0.015-50 B
C611	87-010-545-080	0E	CAP,ELECT 0.22-50V
C612	87-010-545-080	0E	CAP,ELECT 0.22-50V
C613	87-010-545-080	0E	CAP,ELECT 0.22-50V
C614	87-010-545-080	0E	CAP,ELECT 0.22-50V
C615	87-010-154-080	0E	CAP,CHIP 10P
C616	87-010-408-080	0E	CAP,ELECT 47-50V
C617	87-010-408-080	0E	CAP,ELECT 47-50V
C619	87-010-401-080	0E	CAP,ELECT 1-50V
C620	87-010-401-080	0E	CAP,ELECT 1-50V
C631	87-010-197-080		C-CAP,S 0.01-25 KB<EXCEPT D>
C635	87-010-178-080		C-CAP,S 1000P-50 KB<EZ,K>
C638	87-010-182-080		C-CA-,S 2200P-50 KB<EZ,K>
C661	87-010-178-080		C-CAP,S 1000P-50 KB<EZ,K>
C663	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C701	87-010-381-080	0E	CAP,ELECT 330-16V
C702	87-010-404-080	0E	CAP,ELECT 4.7-50V
C703	87-012-286-080	0E	CAP,U 0.01-25
C704	87-012-286-080	0E	CAP,U 0.01-25
C709	87-010-322-080	0E	C-CAP,S 100P-50 CH<D,HE,HR,LH>
C709	87-012-195-080		C-CAP,U 100P-50 J CH<EZ,K>
C711	87-010-263-080	0E	CAP,ELECT 100-10V
C712	87-015-785-080	0E	C-CAP,0.1-25 ZF<D,HE,HR,LH>
C712	87-010-831-080		C-CAP,U 0.1-16 ZF<EZ,K>
C713	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C714	87-012-286-080	0E	CAP,U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50 J CH<EZ,K>
C717	87-012-286-080	0E	CAP,U 0.01-25
C719	87-012-286-080	0E	CAP,U 0.01-25
C720	87-012-195-080	0E	C-CAP,U 100P-50 J CH
C721	87-012-176-080	0E	CAP,15P
C722	87-012-176-080	0E	CAP,15P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C723	87-012-274-080	0E	CHIP CAP,U 1000P-50B
C725	87-012-274-080	0E	CHIP CAP,U 1000P-50B<D,HE,HR,LH>
C725	87-018-131-080		CAP,TC U 1000P-50 KB<EZ,K>
C727	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C728	87-010-248-080	0E	CAP,ELECT 220-10V
C729	87-012-274-080	0E	CHIP CAP,U 1000P-50B
C731	87-012-286-080	0E	CAP,U 0.01-25
C752	87-012-282-080		C-CAP,U 4700P-50 KB<EZ,K>
C753	87-012-195-080		C-CAP,U 100P-50 J CH<EZ,K>
C755	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C756	87-012-286-080	0E	CAP,U 0.01-25
C757	87-012-188-080	0E	C-CAP,U 47P-50 CH
C758	87-012-167-080	0E	C-CAP,U 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 ZF<EZ,K>
C762	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C763	87-010-829-080	0E	CAP,U 0.047-16
C764	87-012-337-080	0E	C-CAP,U 56P-50 CH<D,HE,HR,LH>
C765	87-012-286-080	0E	CAP,U 0.01-25
C766	87-010-197-080		C-CAP,S 0.01-25 KB<EZ,K>
C768	87-012-286-080	0E	CAP,U 0.01-25
C769	87-016-513-080	0E	CAP,ELECT 47-35V
C770	87-010-829-080	0E	CAP,U 0.047-16
C771	87-010-383-080	0E	CAP,ELECT 33-25V
C772	87-010-829-080	0E	CAP,U 0.047-16
C773	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C774	87-010-263-080	0E	CAP,ELECT 100-10V
C775	87-010-404-080	0E	CAP,ELECT 4.7-50V
C776	87-012-286-080	0E	CAP,U 0.01-25
C777	87-010-400-080	0E	CAP,ELECT 0.47-50V
C778	87-010-401-080	0E	CAP,ELECT 1-50V
C779	87-010-401-080	0E	CAP,ELECT 1-50V
C780	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C781	87-010-405-080	0E	CAP,ELECT 10-50V
C782	87-010-405-080	0E	CAP,ELECT 10-50V
C783	87-012-286-080	0E	CAP,U 0.01-25
C784	87-012-286-080	0E	CAP,U 0.01-25
C785	87-010-401-080	0E	CAP,ELECT 1-50V<D,HE,HR,LH>
C785	87-010-405-080		CAP,E 10-50 M 11L SME<EZ,K>
C786	87-010-401-080	0E	CAP,ELECT 1-50V<D,HE,HR,LH>
C786	87-010-405-080		CAP,E 10-50 M 11L SME<EZ,K>
C787	87-010-785-080		C-CAP,U 0.015-25 KB GRM<11K,12EZ>
C787	87-012-284-080		CAP,U 6800P-50<33K,34EZ,36EZ>
C788	87-010-785-080		C-CAP,U 0.015-25 KB GRM<11K,12EZ>
C788	87-012-284-080		CAP,U 6800P-50<33K,34EZ,36EZ>
C789	87-012-275-080	0E	C-CAP,U 1200P-50 B
C790	87-012-275-080	0E	C-CAP,U 1200P-50 B
C791	87-010-405-080	0E	CAP,ELECT 10-50V
C793	87-012-273-080	0E	C-CAP,U 820P-50 B<D,HE,HR,LH>
C793	87-A10-915-080		C-CAP,U 1000P-25 J CH<EZ,K>
C794	87-010-406-080	0E	CAP,ELECT 22-50
C795	87-010-596-080		CAP,S 0.047-16<EXCEPT D>
C796	87-010-403-080	0E	CAP,ELECT 3.3-50V
C797	87-012-278-080		C-CAP,U 2200P-50 B<LH>
C797	87-012-276-080	0E	C-CAP,U 1500P-50KB<EXCEPT LH>
C798	87-012-278-080		C-CAP,U 2200P-50 B<LH>
C798	87-012-276-080	0E	C-CAP,U 1500P-50KB<EXCEPT LH>
C799	87-010-829-080	0E	CAP,U 0.047-16
C803	87-A10-207-080		CAP,TC U 0.01-50 KB<EZ,K>
C812	87-012-286-080	0E	CAP,U 0.01-25
C814	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C820	87-010-260-080	0E	CAP,ELECT 47-25V
C821	87-012-286-080	0E	CAP,U 0.01-25
C822	87-012-286-080	0E	CAP,U 0.01-25
C823	87-012-286-080	0E	CAP,U 0.01-25
C828	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C829	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C859	87-012-286-080		C-CAP,U 0.01-25<EZ>
C861	87-012-199-080		C-CAP,U 220P-50 J CH<EZ>
C862	87-012-199-080		C-CAP,U 220P-50 J CH<EZ>
C863	87-012-270-080		C-CAP,U 470P-50 KB<EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C864	87-010-405-080		CAP,E 10-50 M 11L SME<EZ>
C865	87-010-196-080		C-CAP,S 0.1-25 ZF<EZ>
C866	87-010-405-080		CAP,E 10-50 M 11L SME<EZ>
C867	87-012-286-080		C-CAP,U 0.01-25 KB<EZ>
C868	87-012-184-080		C-CAP,U 33P-50 J CH<EZ>
C869	87-012-180-080		C-CAP,U 22P-50 J CH<EZ>
C872	87-010-400-080	0E	CAP,E 0.47-50 M 11L SME<D>
C873	87-010-404-080	0E	CAP,E 4.7-50 M 11L SME<D>
C877	87-012-278-080	0E	C-CAP,U 2200P-50 KB<D>
C878	87-012-278-080	0E	C-CAP,U 2200P-50 KB<D>
C881	87-012-141-080	0E	C-CAP,S 0.22-16 ZF<D>
C883	87-010-404-080	0E	CAP,E 4.7-50 M 11L SME<D>
C884	87-010-260-080	0S	CAP,E 47-25 M 11L SME<D>
C885	87-010-545-080	0E	CAP,E 0.22-50 M 11L SME<D>
C886	87-010-545-080	0E	CAP,E 0.22-50 M 11L SME<D>
C887	87-012-286-080	0E	C-CAP,U 0.01-25 KB<D>
C888	87-010-787-080	0E	C-CAP,U 0.022-25 KB<D>
C889	87-010-248-080	0E	CAP,E 220-10 M 11L SME<D>
C909	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C910	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C940	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C942	87-012-172-080		C-CAP,U 10P-50 D CH<EZ,K>
C947	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C949	87-A10-039-080		C-CAP,U 470P-50 J CH<EZ,K>
C952	87-012-286-080		C-CAP,U 0.01-25 KB<EZ,K>
C958	87-010-197-080		C-CAP,S 0.01-25 KB<EZ,K>
C959	87-010-831-080	0E	C-CAP,U 0.1-16 ZF
C960	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C961	87-012-170-080	0E	C-CAP,U 8P-50 CH<D,HE,HR,LH>
C962	87-010-401-080		CAP,E 1-50 M 11L SME<EZ,K>
C963	87-010-196-080	0E	CHIP CAP,0.1-25<D,HE,HR,LH>
CF801	87-008-261-010	1A	FILTER,SFE10.7MA5-A<D,HE,HR,LH>
CF801	87-008-423-010		FLTR,CF SFE 10.7M53G-A<EZ,K>
CF802	87-008-261-010	1A	FILTER,SFE10.7MA5-A<D,HE,HR,LH>
CF802	82-785-747-010		CF,MS2 GHY R<EZ,K>
CN202	87-099-719-010	1B	CONN,30P TYK-B(X)
CN351	87-A60-624-010	0E	CONN,7P V 2MM JMT
CN671	87-099-210-010	0E	CONN,5P H BLK 6216
FFE801	A8-6ZA-19D-070	--	6ZA-1 YFEJNC<D>
FFE801	A8-8ZA-190-030		8ZA-1 FEUNM<HE,HR,LH>
FFE801	A8-6ZA-191-130		6ZA-1 FEENM<EZ,K>
J231	87-A60-420-010	1A	JACK,3.5 ST(MSC)
J241	87-A60-217-010	1A	TERMINAL,SPKR 4P
J601	87-A60-881-010	--	JACK,PIN 2P MSP-242V05 PBSN
J801	87-A60-202-010	1A	TERMINAL,ANT 4P MSP<D,HE,HR,LH>
J801	87-A60-880-010		TERMINAL,ANT-PAL 2P MSP313<EZ,K>
L201	87-005-366-010	1A	COIL,1UH
L202	87-005-366-010	1A	COIL,1UH
L451	87-007-342-010	0E	COIL,OSC 85K BIAS
L771	87-A50-266-010	1A	COIL,FM DET-2N(TOK)
L772	88-CL4-692-010	--	FLTR,APCFMP-450(TOK)<D>
L772	88-CL4-693-010		FLTR,PCFAYH-450(TOK)<EXCEPT D>
L781	87-005-847-080		COIL,2.2UH K CECS<EZ,K>
L832	87-005-847-080		COIL,2.2UH K CECS<EZ,K>
L851	87-005-847-080		COIL,2.2UH K CECS<EZ>
L941	87-A50-020-010		COIL,ANT LW(COI)252KHZ<EZ,K>
L942	87-A50-019-010		COIL,OSC LW(COI)856KHZ<EZ,K>
L981	87-NF4-651-110		COIL,AM PACK 2N(TOM)<EZ,K>
L981	87-NF4-650-010	1D	COIL,AM PACK 4N(TOK)<D,HE,HR,LH>
⚠ PR201	87-A90-473-080	0E	PROTECTOR,3.5A 491 SERIES 60V
PR202	87-A90-473-080	0E	PROTECTOR,3.5A 491 SERIES 60V
⚠ PR601	87-026-689-080	0E	PROTECTOR,1A 491 SERIES 60V
⚠ R223	87-A00-258-080	0E	RES,M/F 0.22-1W J
R224	87-A00-258-080	0E	RES,M/F 0.22-1W J
R249	87-A00-258-080	0E	RES,M/F 0.22-1W J
R250	87-A00-258-080	0E	ES,M/F 0.22-1W J
TC942	87-011-164-010		TRIMMER,CER30P 4.5X3.9VCT31<EZ,K>
W101	8Z-CL7-652-110	1A	CONN ASSY,8P ZCL7
X721	87-A70-061-010	1A	VIB,XTAL 4.500MHZ CSA-309
X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<EZ>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
X891	87-030-394-010	1B	VIB,CER 3.5498MHZ CSA-MGF228<D>

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C302	87-010-197-080	0E	CAP,CHIP 0.01 DM
C304	87-010-405-040	0E	CAP,E 10-50
C305	87-A10-797-040	0E	CAP,E 47-35 M 5L SRM
C307	87-010-421-040	0E	CAP,E 4.7-50 5L
C308	87-010-421-040	0E	CAP,E 4.7-50 5L
C309	87-015-883-080	0E	CHIP CAPACITOR,0.022 (D)
C313	87-010-263-040	0E	CAP,E 100-10
C314	87-A10-189-040	0E	CAP,E 220-10
C315	87-010-198-080	0E	CAP,CHIP 0.022
C316	87-010-197-080	0E	CAP,CHIP 0.01 DM
C317	87-010-198-080	0E	CAP,CHIP 0.022
C318	87-010-320-080	0E	CHIP CAP,68P
C319	87-010-320-080	0E	CHIP CAP,68P
C320	87-010-320-080	0E	CHIP CAP,68P
C321	87-010-320-080	0E	CHIP CAP,68P
C322	87-010-320-080	0E	CHIP CAP,68P
C323	87-010-320-080	0E	CHIP CAP,68P
C324	87-010-320-080	0E	CHIP CAP,68P
C325	87-010-320-080	0E	CHIP CAP,68P
C326	87-010-320-080	0E	CHIP CAP,68P
C327	87-010-320-080	0E	CHIP CAP,68P
C328	87-010-320-080	0E	CHIP CAP,68P
C329	87-010-198-080	0E	CAP,CHIP 0.022
C330	87-010-318-080	0E	C-CAP,S 47P-50 CH
C331	87-010-312-080	0E	C-CAP,S 15P-50 CH
C333	87-010-401-040	0E	CAP,E 1-50 SME
C335	87-010-316-080	0E	C-CAP,S 33P-50 CH
C338	87-010-197-080	0E	CAP,CHIP 0.01 DM
C339	87-010-197-080	0E	CAP,CHIP 0.01 DM
C340	87-010-197-080	0E	CAP,CHIP 0.01 DM
CN301	87-099-720-010	1B	CONN,30P TYK-B(P)
CN302	87-CL4-704-010	1B	CONN,ASSY 9P DECK
CN303	87-099-203-010	0E	CONN,10P 6216 H
FC303	88-910-261-210	0E	FF-CABLE,10P 1.25 260MM
FL301	8Z-CL7-682-110	2M	FL,SVA-11MM23
LED301	87-A40-229-040	0E	LED,SLR-342VR TB7 RED
LED302	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED303	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED304	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
LED305	87-A40-619-040	0E	LED,SLR-56PT-T31-W GRN
S301	87-A90-095-080	0E	SW,TACT EVQ11G04M
S302	87-A90-095-080	0E	SW,TACT EVQ11G04M
S303	87-A90-095-080	0E	SW,TACT EVQ11G04M
S304	87-A90-095-080	0E	SW,TACT EVQ11G04M
S305	87-A90-095-080	0E	SW,TACT EVQ11G04M
S306	87-A90-095-080	0E	SW,TACT EVQ11G04M
S307	87-A90-095-080	0E	SW,TACT EVQ11G04M
S308	87-A90-095-080	0E	SW,TACT EVQ11G04M
S309	87-A90-095-080	0E	SW,TACT EVQ11G04M
S310	87-A90-095-080	0E	SW,TACT EVQ11G04M
S311	87-A90-095-080	0E	SW,TACT EVQ11G04M
S312	87-A90-095-080	0E	SW,TACT EVQ11G04M
S313	87-A90-095-080	0E	SW,TACT EVQ11G04M
S314	87-A90-095-080	0E	SW,TACT EVQ11G04M
S315	87-A90-095-080	0E	SW,TACT EVQ11G04M
S316	87-A90-095-080	0E	SW,TACT EVQ11G04M
S317	87-A90-095-080	0E	SW,TACT EVQ11G04M
S318	87-A90-095-080	0E	SW,TACT EVQ11G04M
S351	87-A90-085-010	1C	SW,RTRY EC16B 24204
X301	87-030-375-080	1A	IB,CF 4.19MG200

CD C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C1	87-010-406-080	0E	CAP,ELECT 22-50
C2	87-010-197-080	0E	CAP,CHIP 0.01 DM
C3	87-010-401-080	0E	CAP,ELECT 1-50V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C4	87-010-371-080	0E	CAP,ELECT 470-6.3V
C5	87-010-197-080	0E	CAP,CHIP 0.01 DM
C6	87-010-374-080	0E	CAP,ELECT 47-10V
C7	87-010-178-080	0E	CHIP CAP,1000P
C8	87-010-198-080	0E	CAP,CHIP 0.022
C9	87-010-263-080	0E	CAP,ELECT 100-10V
C10	87-010-263-080	0E	CAP,ELECT 100-10V
C12	87-010-401-080	0E	CAP,ELECT 1-50V
C13	87-010-197-080	0E	CAP,CHIP 0.01 DM
C14	87-010-405-080	0E	CAP,ELECT 10-50V
C16	87-010-544-080	0E	CAP,ELECT 0.1-50V
C17	87-010-178-080	0E	CHIP CAP,1000P
C18	87-010-213-080	0E	C-CAP,S 0.015-50 B
C20	87-016-369-080	0E	C-CAP,S 0.033-25 B K
C21	87-A10-306-080		CAP,M 0.082-50J<33K,34EZ,36EZ>
C21	87-A11-010-080	0E	CAP,M 0.082<EXCEPT 33K,34EZ,36EZ>
C22	87-010-180-080	0E	C-CER,1500P
C23	87-010-993-080	0E	C-CAP,S 0.056-25 B
C24	87-012-155-080	0E	C-CAP,180P-50CH
C26	87-A11-014-080	0E	CAP,M 0.22-50 J DE
C29	87-010-178-080	0E	CHIP CAP,1000P
C30	87-010-178-080	0E	CHIP CAP,1000P
C31	87-010-402-080	0E	CAP,ELECT 2.2-50V
C32	87-010-403-080	0E	CAP,ELECT 3.3-50V
C33	87-010-401-080	0E	CAP,ELECT 1-50V
C34	87-010-186-080	0E	CAP,CHIP 4700P
C35	87-010-197-080	0E	CAP,CHIP 0.01 DM
C36	87-010-374-080	0E	CAP,ELECT 47-10V
C37	87-010-404-080	0E	CAP,ELECT 4.7-50V
C38	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C39	87-010-178-080	0E	CHIP CAP,1000P
C40	87-010-147-080	0E	C-CAP,S 3P-50 CH
C41	87-A10-301-080		CAP,M 0.033-50 J<33K,34EZ,36EZ>
C41	87-A11-006-080	0E	CAP,M 0.033<EXCEPT 33K,34EZ,36EZ>
C42	87-010-313-080	0E	CAP,CHIP 18P
C44	87-010-176-080	0E	C-CAP,S 680P-50 SL
C45	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C46	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C47	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C48	87-010-315-080	0E	C-CAP,S 27P-50 CH
C50	87-012-140-080	0E	CAP,470P
C57	87-010-316-080	0E	C-CAP,S 33P-50 CH
C58	87-010-316-080	0E	C-CAP,S 33P-50 CH
C59	87-010-263-080	0E	CAP,ELECT 100-10V
C60	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C61	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C62	87-010-370-080	0E	CAP,E 330-6.3 SME
C65	87-010-404-080	0E	CAP,ELECT 4.7-50V
C66	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C67	87-010-263-080	0E	CAP,ELECT 100-10V
C68	87-010-322-080	0E	C-CAP,S 100P-50 J CH GRM<D>
C75	87-010-197-080	0E	CAP,CHIP 0.01 DM
C76	87-A10-102-080	0E	CAP,E 1000-10 REA
C77	87-010-263-080	0E	CAP,ELECT 100-10V
C78	87-010-197-080	0E	CAP,CHIP 0.01 DM
C79	87-010-197-080	0E	CAP,CHIP 0.01 DM
C80	87-010-112-080	0E	CAP,ELECT 100-16V
C81	87-010-405-080	0E	CAP,ELECT 10-50V
C82	87-010-405-080	0E	CAP,ELECT 10-50V
C83	87-012-157-080	0E	C-CAP,S 330P-50 CH
C84	87-012-157-080	0E	C-CAP,S 330P-50 CH
C85	87-010-263-080	0E	CAP,ELECT 100-10V
C90	87-010-197-080	0E	CAP,CHIP 0.01 DM
C91	87-010-404-080	0E	CAP,ELECT 4.7-50V
C92	87-010-235-080	0E	CAP,E 470-16 SME
C93	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C95	87-010-197-080	0E	CAP,CHIP 0.01 DM
C96	87-010-221-080	0E	CAP,ELECT 470-10V
C97	87-010-197-080	0E	CAP,CHIP 0.01 DM
C98	87-012-154-080	0E	C-CAP,S 150P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C99	87-010-374-080	0E	CAP,ELECT 47-10V
C100	87-010-318-080	0E	C-CAP,S 47P-50 CH
C103	87-010-322-080	0E	C-CAP,S 100P-50 CH
C104	87-010-322-080	0E	C-CAP,S 100P-50 CH
C105	87-010-322-080	0E	C-CAP,S 100P-50 CH
C106	87-010-322-080	0E	C-CAP,S 100P-50 CH
C121	87-010-322-080	0E	C-CAP,S 100P-50 CH
C122	87-010-322-080	0E	C-CAP,S 100P-50 CH
C123	87-010-322-080	0E	C-CAP,S 100P-50 CH
C124	87-010-322-080	0E	C-CAP,S 100P-50 CH
C125	87-010-322-080	0E	C-CAP,S 100P-50 CH
C126	87-010-322-080	0E	C-CAP,S 100P-50 CH
C127	87-010-322-080	0E	C-CAP,S 100P-50 CH
C128	87-010-196-080	0E	C-CAP,S 0.1-25 ZF
C129	87-010-805-080	0E	CAP,S 1-16
C131	87-010-805-080	0E	CAP,S 1-16
C132	87-010-805-080	0E	CAP,S 1-16
C133	87-010-315-080	0E	C-CAP,S 27P-50 CH
C151	87-010-805-080	0E	CAP,S 1-16
C155	87-010-197-080	0E	C-CAP,S 0.01-25 KB<D>
C156	87-010-263-080	0E	CAP,E 100-10 M 11L SME
CN1	87-A60-130-010	0E	CONN,5P V FE
CN2	87-099-203-010	0E	CONN,10P 6216 H
CN3	87-A60-131-010	0E	CONN,6P V FE
CN4	87-A60-248-010	0E	CONN,16P H CFF1416
CN6	87-A60-130-010	0E	CONN,5P V FE
FB102	87-A90-896-080	0E	F-BEAD,035600STY7
FC1	88-905-251-110	0E	FF-CABLE,5P 1.25
FC4	8Z-CL7-704-010	--	FF-CABLE,16P 1.0
LED150	87-A40-558-010	0E	LED,SLZ-8128A-01-A<D>
J155	84-ZG1-244-310	1A	CABI,OPTICAL<D>
R70	87-029-124-090	0E	RESISTOR,FUSE 1/4W-2.2
R73	87-029-361-090	0E	FUSING RESISTOR,1/2W-3.3
X1	87-A70-046-010	1B	VIB,XTAL 16.934MHZ
PT C.B			
C101	87-010-387-080	1A	CAP,E 470-25 SME
CN101	87-099-408-010	0E	CONN,8P V WHT EH
⚠F101	87-035-454-010		FUSE,1.6A 250V T218<HE,HR,LH>
⚠FC101	87-033-213-080		FUSE CLAMP,PCF5000<HE>
⚠FC101	87-A90-505-080		FUSE CLAMP,TP351-51<HR,LH>
⚠FC102	87-033-213-080		FUSE CLAMP,PFC5000<HE>
⚠FC102	87-A90-505-080		FUSE CLAMP,TP351-51<HR,LH>
⚠PR101	87-026-681-080	0E	PROTECTOR,5A 491 SERIES
⚠PR102	87-026-681-080	0E	PROTECTOR,5A 491 SERIES
⚠PR104	87-A91-276-080	1B	FUSE,125MA 125V 251<D>
⚠PT101	8Z-CL7-641-010	2A	PT,D<D>
⚠PT101	8Z-CL7-644-010		PT,LH<HE,HR,LH>
⚠PT101	8Z-CL7-643-010		PT,EZ<EZ,K>
⚠PT102	8Z-NF8-660-010	1C	PT,SUB ZNF-8(D)<D>
⚠PT102	8Z-NF8-663-010		PT,SUB ZNF-8(H)<HE,HR,LH>
⚠PT102	8Z-NF8-662-010		PT,SUB ZNF-8(E)<EZ,K>
⚠RY102	87-A90-976-010	1B	RELAY,AC12V SDT-S-112LMR<D,EZ,K>
⚠RY102	87-A91-281-010		RELAY,AC DC12V OSA-SS212<HE,HR,LH>
⚠SW101	87-A90-234-010		SW,SL 1-2-2 SWS2201<HE,HR,LH>
⚠T101	87-A60-317-010	0E	TERMINAL,1P MSC
⚠T102	87-A60-317-010	0E	TERMINAL,1P MSC
DECK C.B			
CON1	87-009-352-010	--	CONN,9P PH H
SFR1	87-024-581-010	0E	SFR,3.3K H KVSF637A
SOL2	82-ZM1-618-410	1B	SOL ASSY,27
SW2	87-036-110-010	1A	SW,MICRO SPPB62
SW3	87-036-110-010	1A	SW,MICRO SPPB62
SW5	87-036-110-010	1A	SW,MICRO SPPB62
SW6	87-A90-248-010	0E	SW,MICRO ESE11SH2CXQ
W1	82-ZM1-625-010	--	RBN-CORD,4P-5S

RELAY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CN301	88-CL4-701-010	0E	CONN ASSY,7P RPEH

CD LOAD C.B

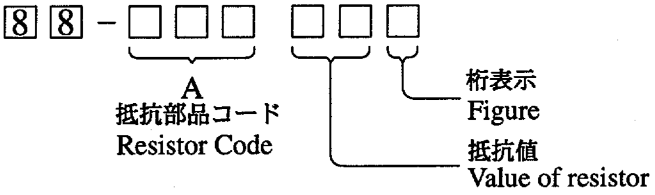
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON6	87-099-210-010	--	CONN,5P 6216H
FC6	88-905-231-110	0E	FF-CABLE,5P 1.25 23
M1	87-045-305-010	1E	MOTOR,RF-500TB DC-5V(2MA)
SW1	87-036-110-010	1A	PUSH SWITCH
SW2	87-036-110-010	1A	PUSH SWITCH

CD DRIVE C.B

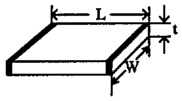
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON3	87-A60-086-010	--	CONN,6P H 6216
FC3	88-906-261-110	0E	FF-CABLE,6P 1.25 26
M20	87-045-358-010	--	MOT,RF-310TA 43
M21	87-045-356-010	--	MOT,RF-310TA 30
SW1	87-A90-042-010	--	SW,LEAF MSW-17310MVP0

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

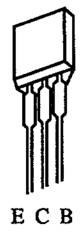
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



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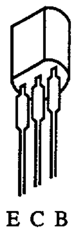
DTA144ES
DTC114ES
DTC144TS
KTA1267
KTC3199



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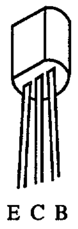
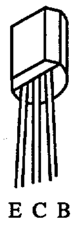
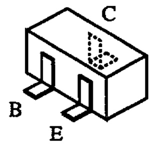
KTC3198



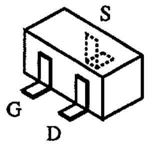
2SA952
2SD655



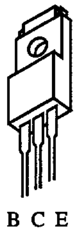
2SA1318
2SC3331



2SA1162
2SC2712
2SC2714
2SC3052
2SD1306
2SD1383
DTA143EK
DTA144TK
DTC114EK
DTC143TK
RT1P141C
RT1P144C



2SK543



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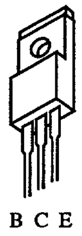

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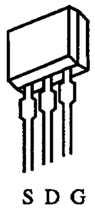
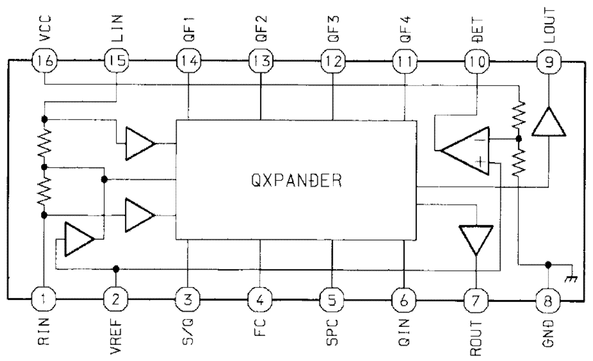


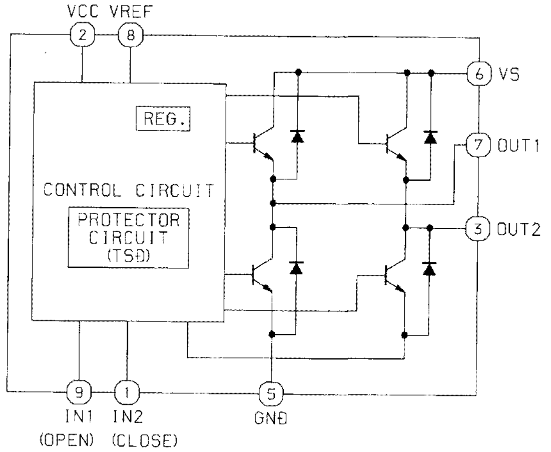
2SK2541

IC BLOCK DIAGRAM – 1

IC, MM1434XF


VCC
LIN
QF1
QF2
QF3
QF4
DET
LOUT
QXPANDER
RIN
VREF
S/Q
FC
SPC
QIN
ROUT
GND

IC, TA7291S

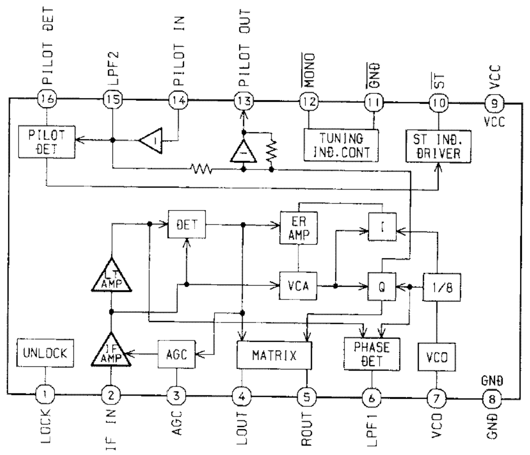

VCC VREF
VS
OUT1
OUT2
REG.
CONTROL CIRCUIT
PROTECTOR CIRCUIT (TSD)
IN1 IN2
(OPEN) (CLOSE)
GND

TRUTH TABLE

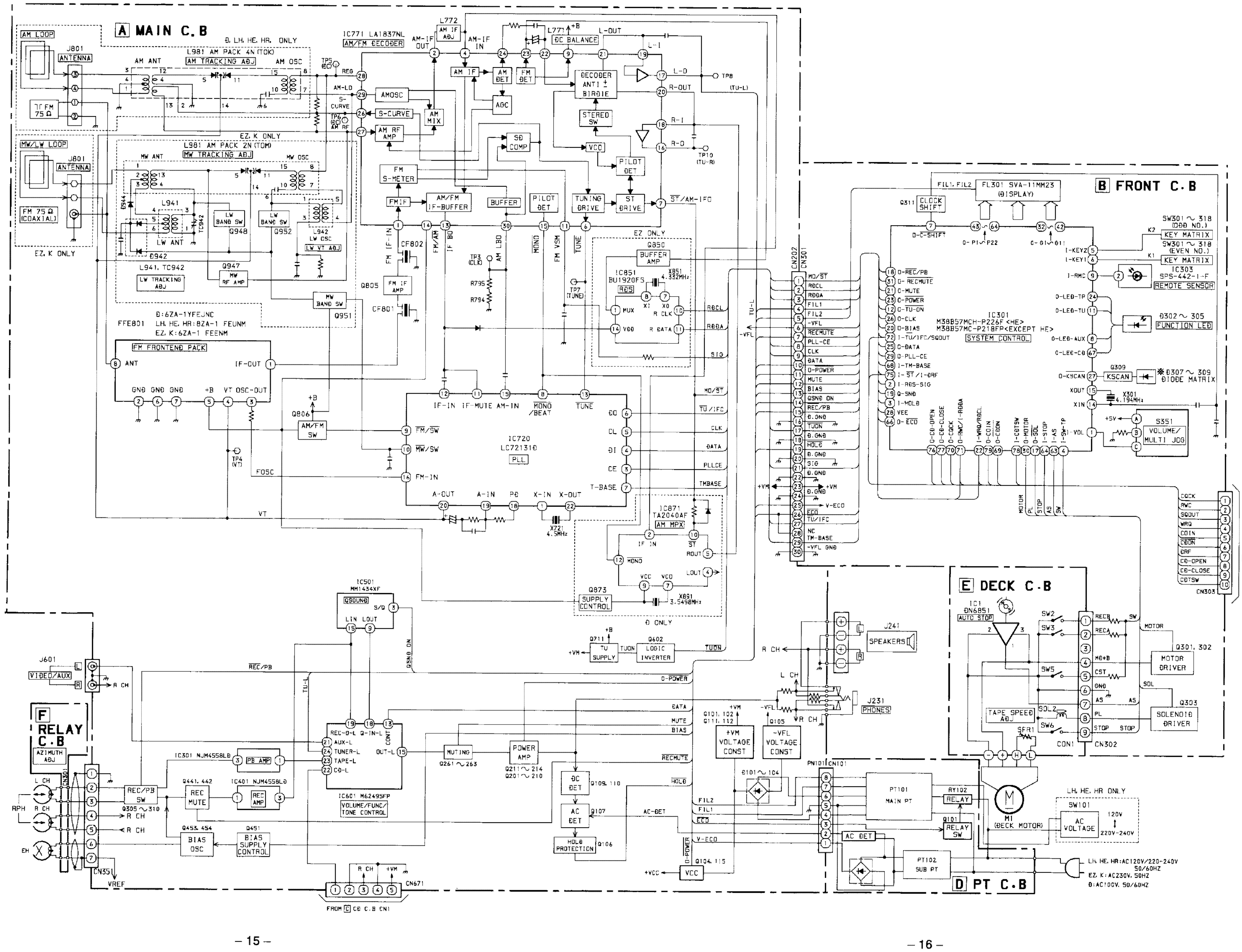
INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	STOP
1	0	H	L	CW
0	1	L	H	CCW
1	1	L	L	BRAKE

∞ :HIGH IMPEDACE
INPUT IS "H" ACITVE

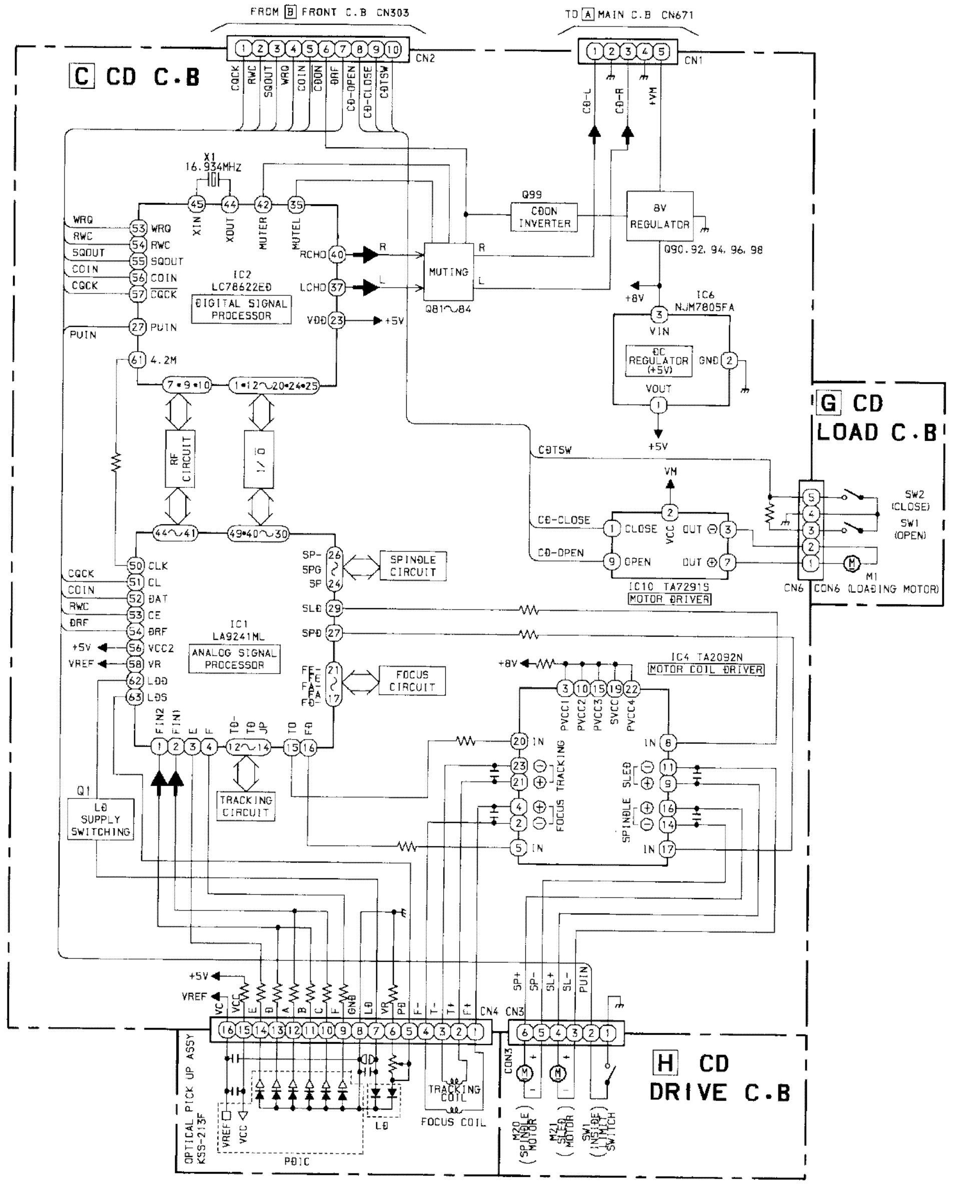
IC, TA2040AF <D ONLY>


PILOT DET
LPF2
PILOT IN
PILOT OUT
MONO
GND
ST
VCC
TUNING IND.CONT
ST IND. DRIVER
DET
ER AMP
VCA
1/8
LF AMP
IF AMP
AGC
MATRIX
PHASE DET
VCO
UNLOCK
LOCK
IF IN
LOUT
ROUT
LPF1

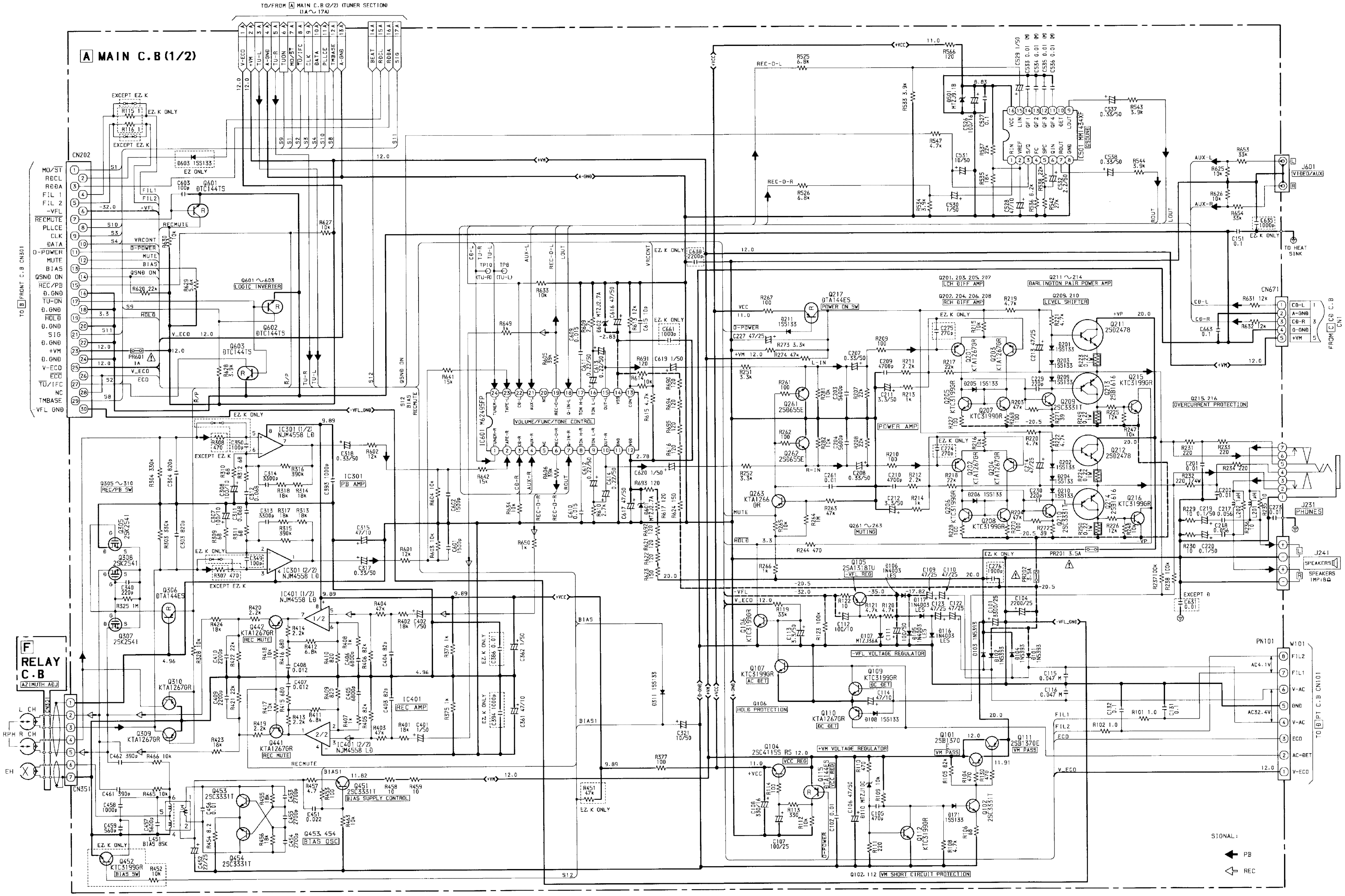
BLOCK DIAGRAM – 1 (MAIN / FRONT / PT / DECK / RELAY)


A MAIN C.B
B FRONT C.B
D PT C.B
E DECK C.B
F RELAY C.B
IC771 LA1837NL AM/FM DECODER
FM FRONTEND PACK
IC720 LC72131D PLL
IC851 BU1920FS RDS
IC871 TA2040AF AM MPX
IC501 MM1434XF QSOUND
IC601 M62495FP VOLUME/FUNC/TONE CONTROL
IC301 M38B57MCH-P226F <HE> M38B57MC-P218FP<EXCEPT HE> SYSTEM CONTROL
FL301 SVA-11MM23 (DISPLAY)
IC1 AN6851 AUTO STOP
PT101 MAIN PT
PT102 SUB PT
M1 (DECK MOTOR)
J241 SPEAKERS
J231 PHONES
J601 VIDEO/AUX
FROM C CD C.B CN1

BLOCK DIAGRAM – 2 (CD / CD LOAD / CD DRIVE)


C CD C.B
G CD LOAD C.B
H CD DRIVE C.B
FROM B FRONT C.B CN303
TO A MAIN C.B CN671
IC2 LC78622ED DIGITAL SIGNAL PROCESSOR
IC1 LA9241ML ANALOG SIGNAL PROCESSOR
IC4 TA2092N MOTOR COIL DRIVER
IC6 NJM7805FA
IC1C TA7291S MOTOR DRIVER
Q99 CDON INVERTER
8V REGULATOR
Q81~84 MUTING
SPINDLE CIRCUIT
FOCUS CIRCUIT
TRACKING CIRCUIT
Q1 LD SUPPLY SWITCHING
OPTICAL PICK UP ASSY KSS-213F
M1 LOADING MOTOR
SW1 (OPEN)
SW2 (CLOSE)

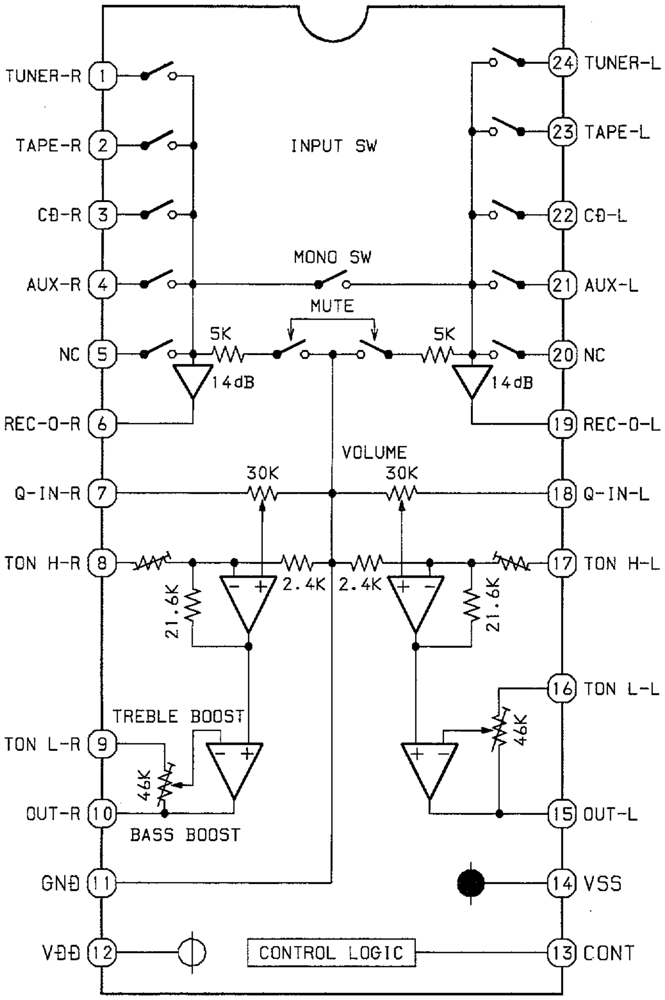
SCHEMATIC DIAGRAM – 1 (MAIN (1 / 2) / RELAY)



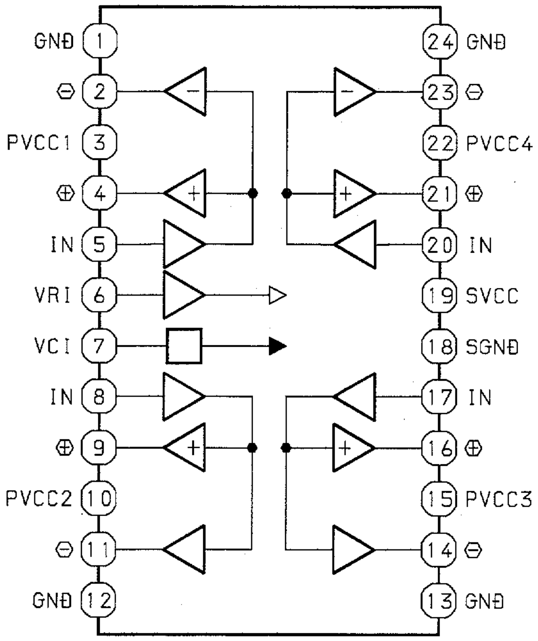
TO/FROM A MAIN C.B (2/2) (TUNER SECTION) (1A～17A)
A MAIN C.B (1/2)
F RELAY C.B
AZIMUTH ADJ
CN202
TO B FRONT C.B CN301
MO/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLLCE
CLK
DATA
D-POWER
MUTE
BIAS
QSND ON
REC/PB
D.GND
TU-ON
D.GND
HOLD
D.GND
SIG
D.GND
+VM
D.GND
V-ECO
D.GND
ECO
TU/IFC
NC
TMBASE
VFL GND
Q601～603 LOGIC INVERTER
Q601 DTC144TS
Q602 DTC144TS
Q603 DTC144TS
D603 1SS133
EZ ONLY
EXCEPT EZ.K
EZ.K ONLY
PR601 1A
IC301 (1/2) NJM4558 LD
IC301 (2/2) NJM4558 LD
IC301 PB AMP
Q305～310 REC/PB SW
Q305 2SK2541
Q306 2SK2541
Q307 2SK2541
Q306 DTA144ES
Q309 KTA1267GR
Q310 KTA1267GR
IC401 (1/2) NJM4558 LD
IC401 (2/2) NJM4558 LD
IC401 REC AMP
Q441 KTA1267GR REC MUTE
Q442 KTA1267GR REC MUTE
Q451 2SC3331T BIAS SUPPLY CONTROL
Q452 KTC3199GR BIAS SW
Q453, 454 BIAS OSC
Q453 2SC3331T
Q454 2SC3331T
L451 BIAS OSC
L CH
R CH
RPH
EH
CN351
IC601 M62495FP VOLUME/FUNC/TONE CONTROL
IC501 MM1434XF (DSP)
D501 MTZJ9.1B
Q201, 203, 205, 207 LCH DIFF AMP
Q202, 204, 206, 208 RCH DIFF AMP
Q211～214 DARLINGTON PAIR POWER AMP
Q209, 210 LEVEL SHIFTER
Q215, 216 OVERCURRENT PROTECTION
Q217 DTA144ES POWER ON SW
Q261～263 MUTING
Q263 KTA1266GR
Q261 2SD655E
Q262 2SD655E
POWER AMP
Q211 2SD2478
Q212 2SD2478
Q213 2SB1616
Q214 2SB1616
Q215 KTC3199GR
Q216 KTC3199GR
PR201 3.5A
J601 VIDEO/AUX
CN671
FROM C CD C.B CN1
TO HEAT SINK
J231 PHONES
J241 SPEAKERS IMP:8Ω
Q105 2SA1318TU -VFL REG
-VFL VOLTAGE REGULATOR
Q106 HOLD PROTECTION
Q107 KTC3199GR AC DET
Q109 KTC3199GR DC DET
Q110 KTA1267GR DC DET
Q104 2SC4115S RS VCC REG
+VM VOLTAGE REGULATOR
Q101 2SB1370 VM PASS
Q111 2SB1370E VM PASS
Q102, 112 VM SHORT CIRCUIT PROTECTION
Q112 KTC3199GR
Q102 2SC3331T
PN101
W101
TO D PT C.B CN101
FIL2
FIL1
V-AC
GND
V-AC
ECO
AC-DET
V-ECO
AC4.1V
AC32.4V
SIGNAL:
PB
REC

IC BLOCK DIAGRAM – 2

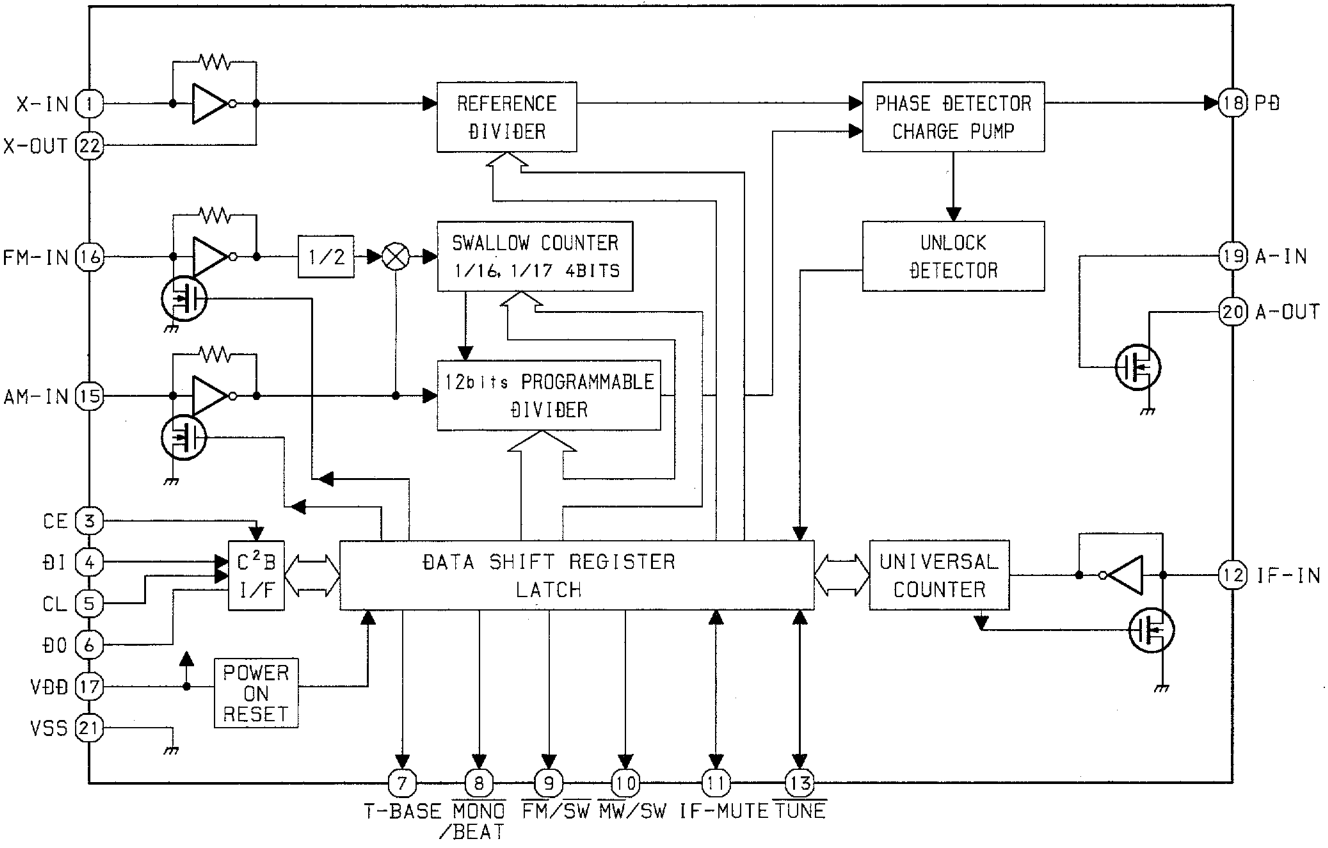
IC, M62495FP


TUNER-R 1
TAPE-R 2
CD-R 3
AUX-R 4
NC 5
REC-O-R 6
Q-IN-R 7
TON H-R 8
TON L-R 9
OUT-R 10
GND 11
VDD 12
24 TUNER-L
23 TAPE-L
22 CD-L
21 AUX-L
20 NC
19 REC-O-L
18 Q-IN-L
17 TON H-L
16 TON L-L
15 OUT-L
14 VSS
13 CONT
INPUT SW
MONO SW
MUTE
5K
5K
14dB
14dB
VOLUME
30K
30K
2.4K
2.4K
21.6K
21.6K
TREBLE BOOST
BASS BOOST
46K
46K
CONTROL LOGIC

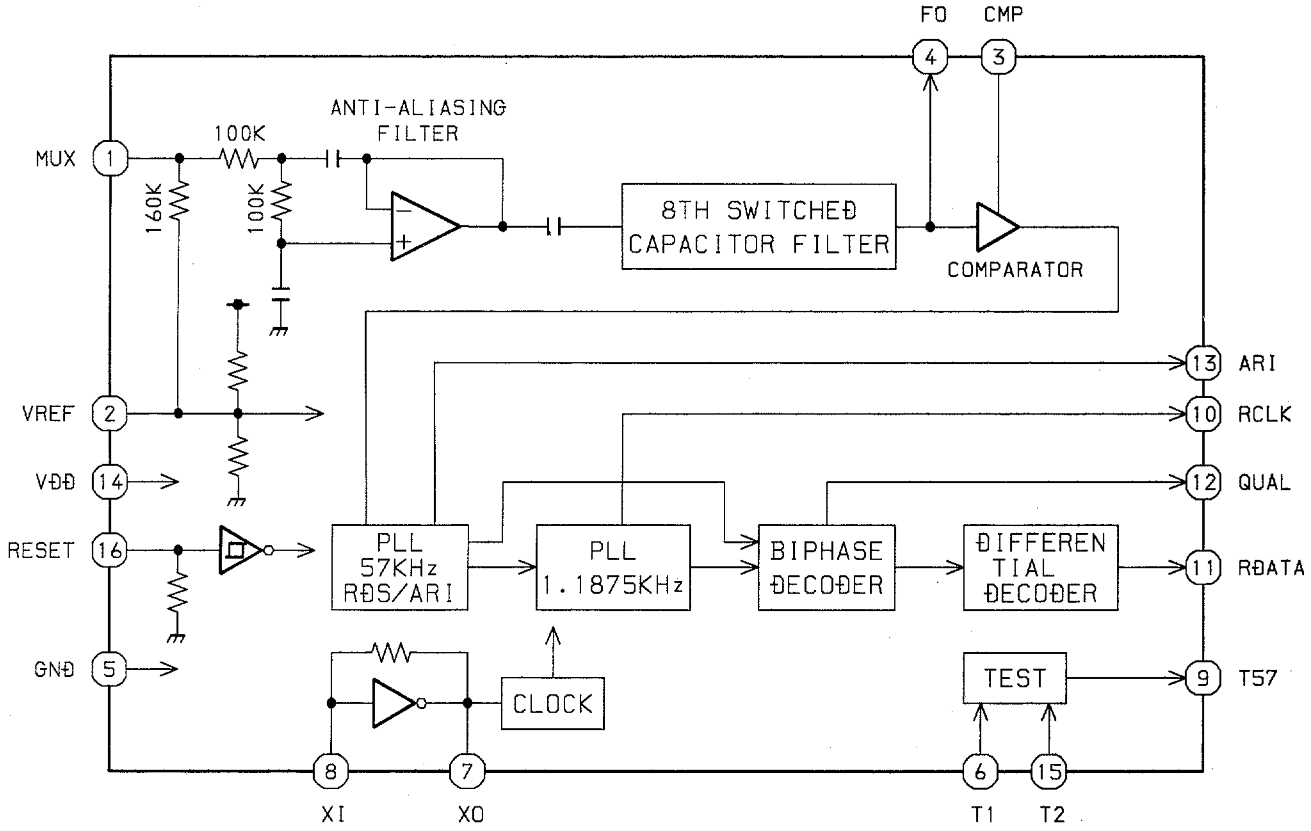
IC. TA2092N


GND 1
⊖ 2
PVCC1 3
⊕ 4
IN 5
VRI 6
VCI 7
IN 8
⊕ 9
PVCC2 10
⊖ 11
GND 12
24 GND
23 ⊖
22 PVCC4
21 ⊕
20 IN
19 SVCC
18 SGND
17 IN
16 ⊕
15 PVCC3
14 ⊖
13 GND

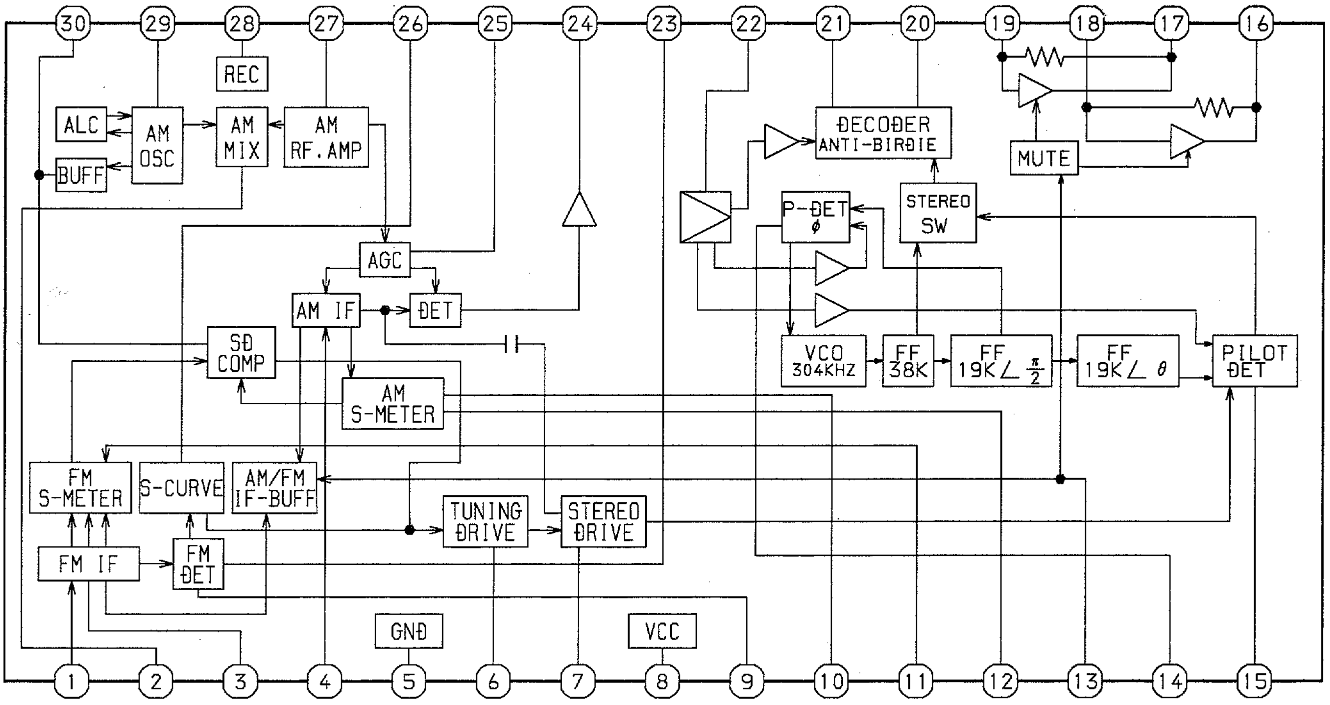
IC, LC72131D


X-IN 1
X-OUT 22
FM-IN 16
AM-IN 15
CE 3
DI 4
CL 5
DO 6
VDD 17
VSS 21
18 PD
19 A-IN
20 A-OUT
12 IF-IN
7 T-BASE
8 MONO/BEAT
9 FM/SW
10 MW/SW
11 IF-MUTE
13 TUNE
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
UNLOCK DETECTOR
1/2
SWALLOW COUNTER 1/16, 1/17 4BITS
12bits PROGRAMMABLE DIVIDER
C²B I/F
DATA SHIFT REGISTER LATCH
UNIVERSAL COUNTER
POWER ON RESET

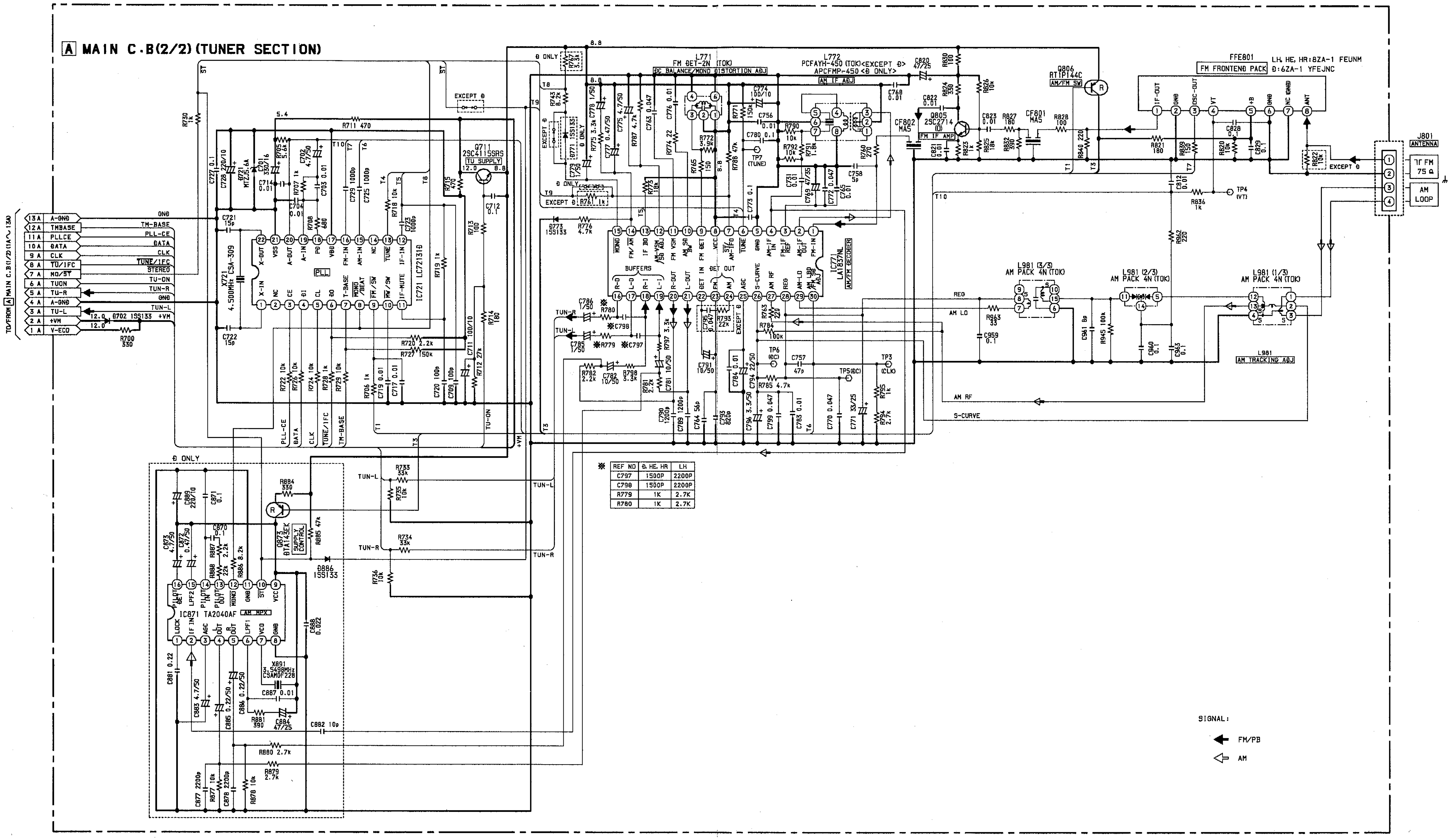
IC, BU1920FS <EZ ONLY>


FO
CMP
4
3
ANTI-ALIASING FILTER
100K
MUX
1
160K
100K
8TH SWITCHED CAPACITOR FILTER
COMPARATOR
13
ARI
VREF
2
10
RCLK
VDD
14
12
QUAL
RESET
16
PLL 57KHz RDS/ARI
PLL 1.1875KHz
BIPHASE DECODER
DIFFERENTIAL DECODER
11
RDATA
GND
5
CLOCK
TEST
9
T57
8
7
6
15
XI
XO
T1
T2

IC, LA1837NL


30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
REC
ALC
AM OSC
AM MIX
AM RF.AMP
BUFF
DECODER ANTI-BIRDIE
MUTE
P-DET φ
STEREO SW
AGC
AM IF
DET
SD COMP
VCO 304KHZ
FF 38K
FF 19K∠ π/2
FF 19K∠ θ
PILOT DET
AM S-METER
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

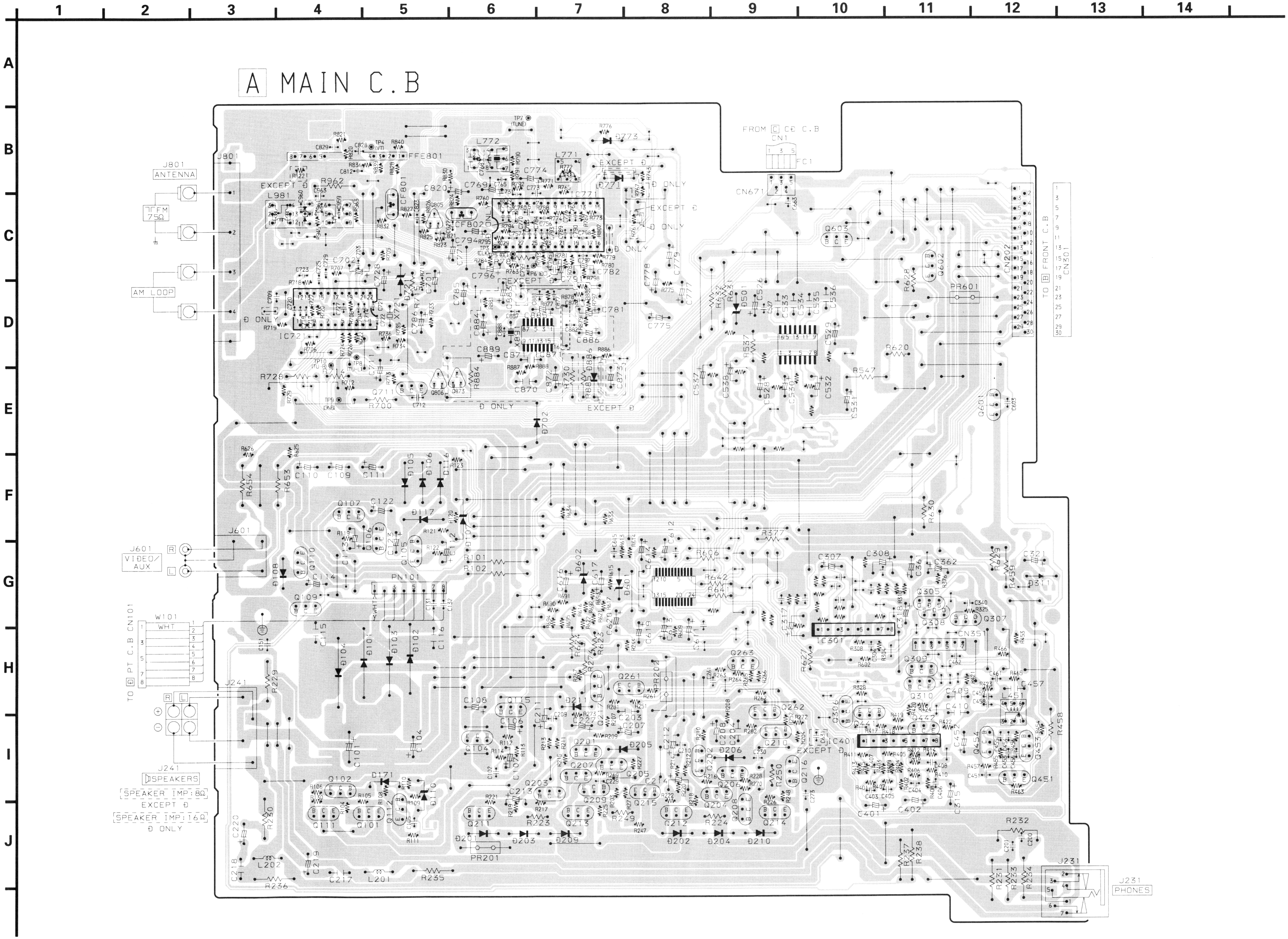
SCHEMATIC DIAGRAM – 2 (MAIN (2 / 2) : TUNER SECTION) <D, HE, HR, LH>


A MAIN C.B(2/2)(TUNER SECTION)
TO/FROM A MAIN C.B1/2(1A~13A)
13A A-GND
12A TMBASE
11A PLLCE
10A DATA
9A CLK
8A TU/IFC
7A MO/ST
6A TUON
5A TU-R
4A A-GND
3A TU-L
2A +VM
1A V-ECO
IC721 LC72131D
PLL
X721 4.500MHz CSA-309
Q711 2SC4115SRS TU SUPPLY
L771 FM DET-2N (TOK)
DC BALANCE/MONO DISTORTION ADJ
L772 PCFAYH-450 (TOK)<EXCEPT D> APCFMP-450 <D ONLY>
AM IF ADJ
Q804 RT1P144C AM/FM SW
Q805 2SC2714 (O) FM IF AMP
CF802 MA5
CF801 MA5
FFE801 FM FRONTEND PACK
LH, HE, HR:8ZA-1 FEUNM D:6ZA-1 YFEJNC
IF-OUT GND OSC-OUT VT +B GND NC GND ANT
J801 ANTENNA
FM 75 Ω
AM LOOP
IC771 LA1837NL AM/FM DECODER
BUFFERS
L981 (3/3) AM PACK 4N (TOK)
L981 (2/3) AM PACK 4N (TOK)
L981 (1/3) AM PACK 4N (TOK)
L981 AM TRACKING ADJ
TP3 (CLK)
TP4 (VT)
TP5 (DC)
TP6 (DC)
TP7 (TUNE)
AM RF
S-CURVE
REG
AM LO
D ONLY
EXCEPT D
IC871 TA2040AF AM MPX
Q873 DTA143EK SUPPLY CONTROL
X891 3.5498MHz CSAMDF22B
D886 1SS133
D702 1SS133
D773 1SS133
TUN-L
TUN-R
SIGNAL:
FM/PB
AM

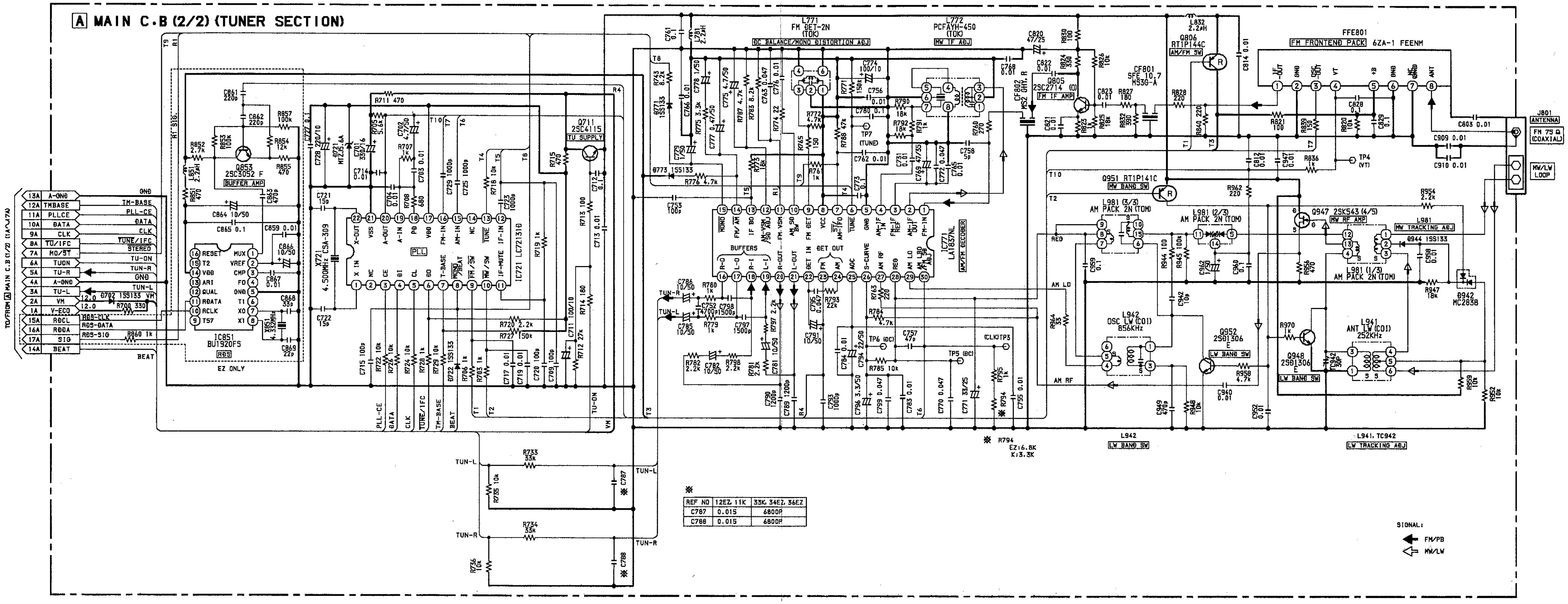
※

REF NO	D, HE, HR	LH
C797	1500P	2200P
C798	1500P	2200P
R779	1K	2.7K
R780	1K	2.7K

WIRING – 1 (MAIN) <D, HE, HR, LH>


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
A MAIN C.B
J801
ANTENNA
FM 75Ω
AM LOOP
J601
VIDEO/AUX
R
L
TO D PT C.B CN101
W101
WHT
J241
SPEAKERS
SPEAKER IMP:8Ω
EXCEPT D
SPEAKER IMP:16Ω
D ONLY
FROM C CD C.B
CN1
FC1
CN671
TO B FRONT C.B
CN301
CN202
J231
PHONES
IC771
IC721
IC301
IC401
CN351
PN101
PR601
PR201
FFE801
L772
L771
L981
CF801
CF802
EXCEPT D
D ONLY
TP7 (TUNE)
TP4 (VT)
TP8
TP9 (GND)
TP10

SCHEMATIC DIAGRAM – 3 (MAIN (2 / 2) : TUNER SECTION) <EZ, K>

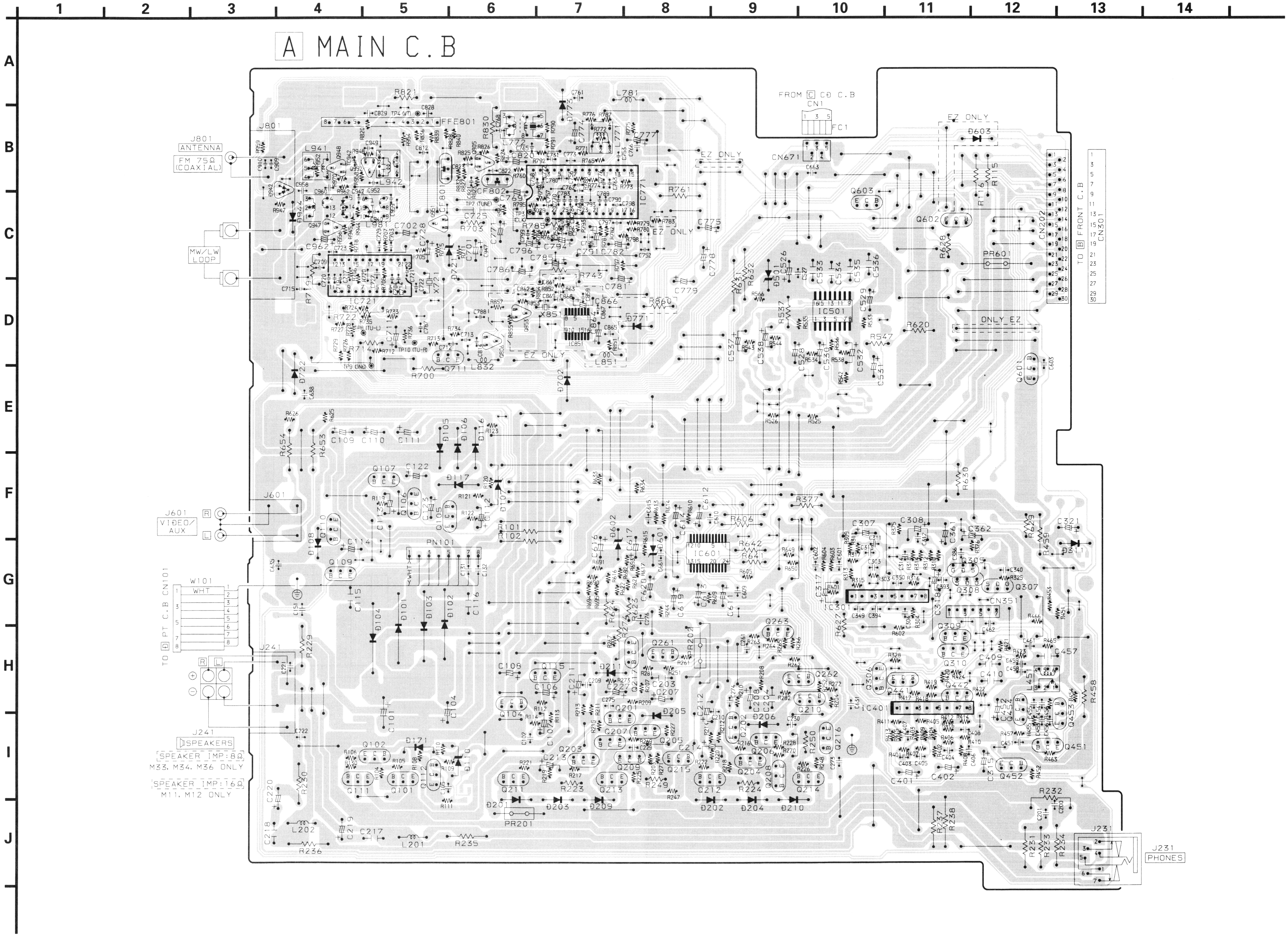

A MAIN C.B (2/2) (TUNER SECTION)
TO/FROM A MAIN C.B (1/2) (1A~17A)
13A A-GND
12A TMBASE
11A PLLCE
10A DATA
9A CLK
8A TU/IFC
7A MO/ST
6A TUON
5A TU-R
4A A-GND
3A TU-L
2A VM
1A V-ECO
15A RDCL
16A RDDA
17A SIG
14A BEAT
IC851 BU1920FS RDS
EZ ONLY
Q853 2SC3052 F BUFFER AMP
Q711 2SC4115 TU SUPPLY
IC721 LC72131D
X721 4.500MHz CSA-309
IC771 LA1837NL AM/FM DECODER
L771 FM DET-2N (TOK) DC BALANCE/MONO DISTORTION ADJ
L772 PCFAYH-450 (TOK) MW IF ADJ
Q805 2SC2714 (O) FM IF AMP
CF801 SFE 10.7 MS3G-A
CF802 MS2 GHY. R
Q806 RT1P144C AM/FM SW
FFE801 FM FRONTEND PACK 6ZA-1 FEENM
J801 ANTENNA FM 75Ω (COAXIAL)
MW/LW LOOP
Q951 RT1P141C MW BAND SW
L981 (3/3) AM PACK 2N (TOK)
L981 (2/3) AM PACK 2N (TOK)
L981 (1/3) AM PACK 2N (TOK)
Q947 2SK543 (4/5) MW RF AMP
L981 MW TRACKING ADJ
D944 1SS133
Q942 MC2838
L942 OSC LW (COI) 856KHz
Q952 2SD1306 LW BAND SW
Q948 2SD1306 LW BAND SW
L941 ANT LW (COI) 252KHz
L942 LW BAND SW
L941, TC942 LW TRACKING ADJ
TP4 (VT)
TP5 (BC)
TP6 (BC)
TP7 (TUNE)
(CLK)TP3
TUN-L
TUN-R
R733 33k
R734 33k
R735 10k
R736 10k
C787
C788
SIGNAL:
FM/PB
MW/LW

※ R794
EZ:6.8K
K:3.3K

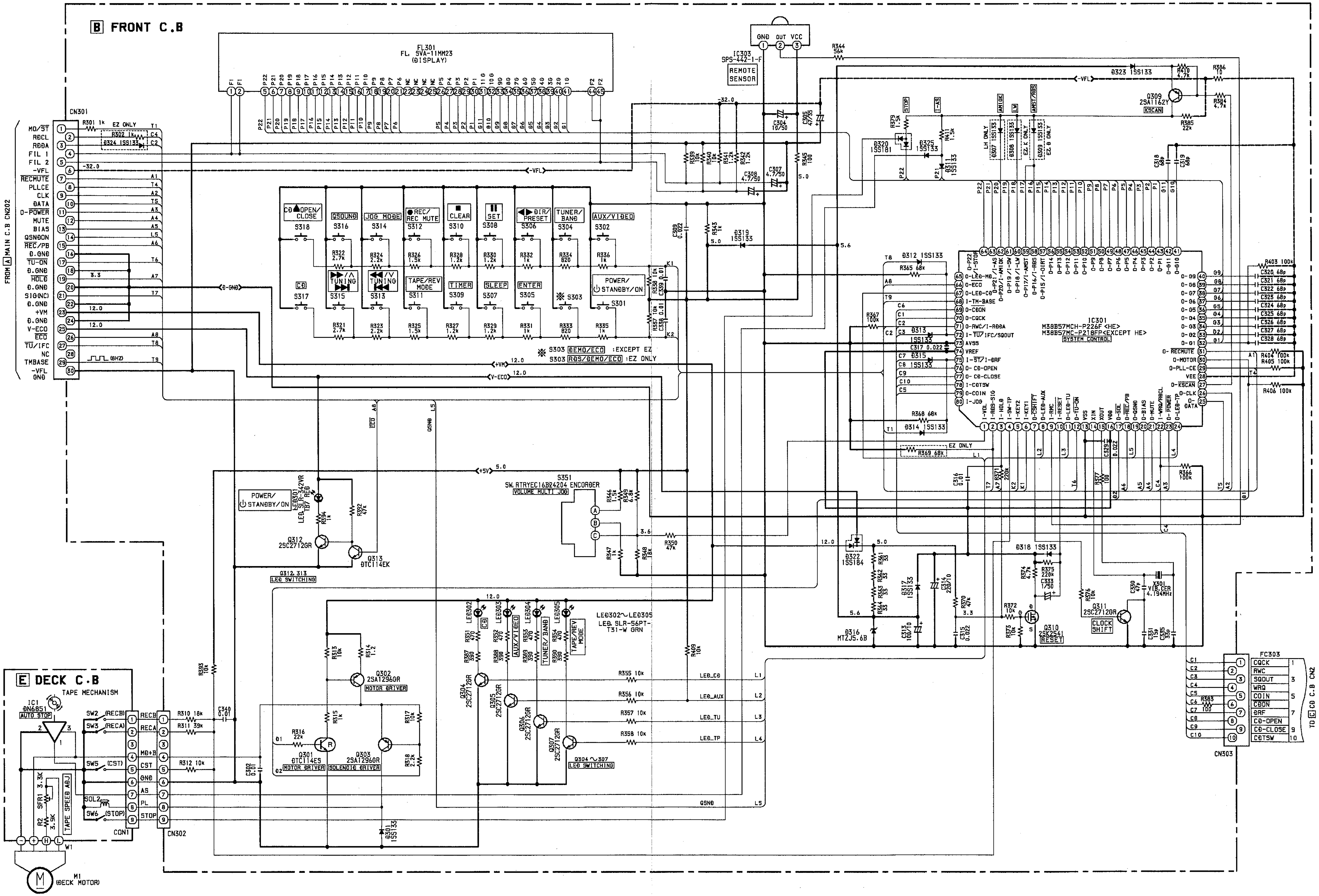
※

REF NO	12EZ, 11K	33K, 34EZ, 36EZ
C787	0.015	6800P
C788	0.015	6800P

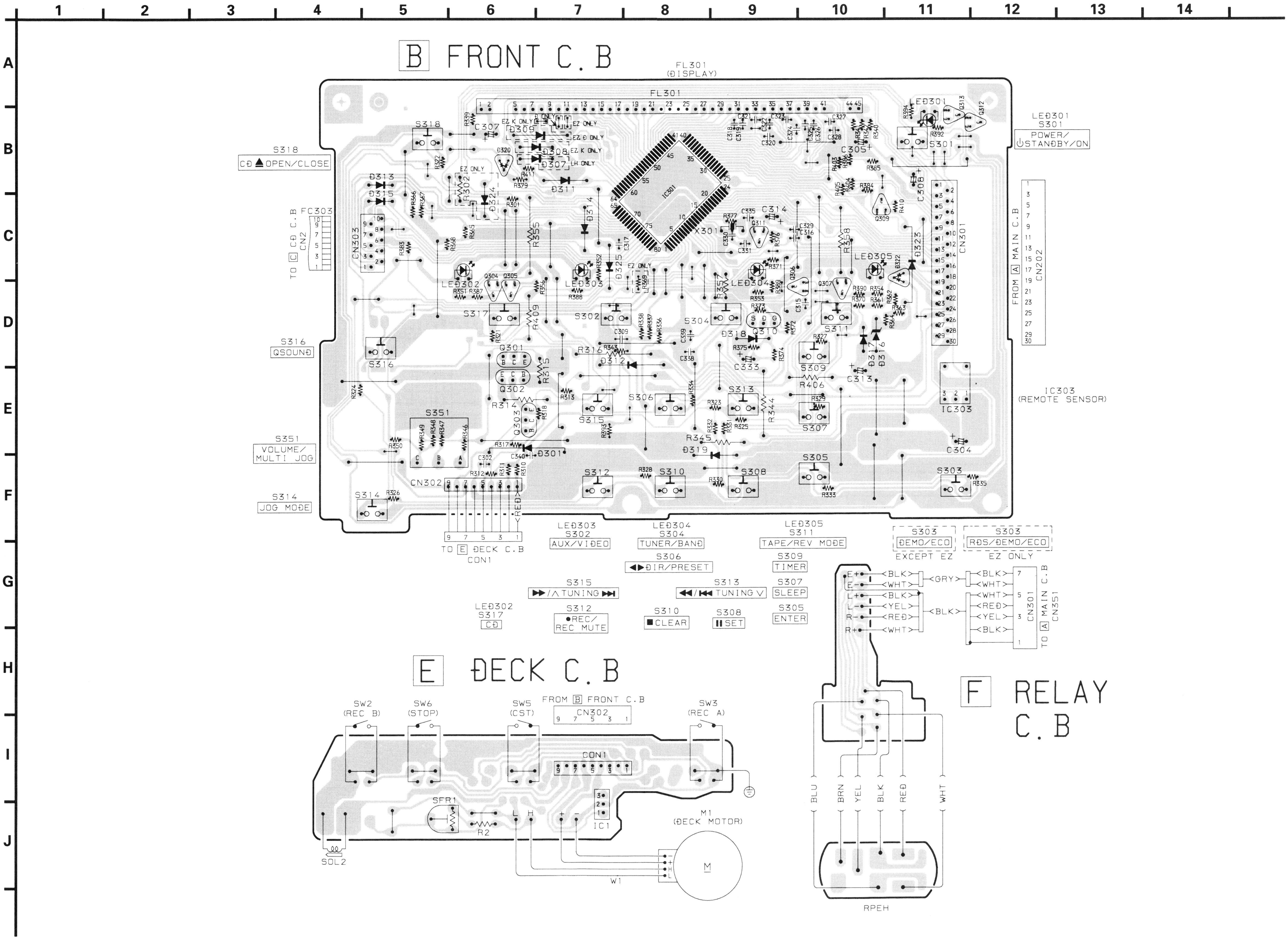
WIRING – 2 (MAIN) <EZ, K>


1 2 3 4 5 6 7 8 9 10 11 12 13 14
A B C D E F G H I J
A MAIN C.B
J801
ANTENNA
FM 75Ω
(COAXIAL)
MW/LW
LOOP
J601
VIDEO/
AUX
R
L
TO D PT C.B CN101
W101
WHT
J241
SPEAKERS
SPEAKER IMP:8Ω
M33, M34, M36 ONLY
SPEAKER IMP:16Ω
M11, M12 ONLY
FROM C CD C.B
CN1
FC1
CN671
EZ ONLY
ONLY EZ
CN202
TO B FRONT C.B
CN301
IC721
IC771
IC851
IC501
IC601
IC301
IC401
PN101
PR201
PR601
J231
PHONES

SCHEMATIC DIAGRAM – 4 (FRONT / DECK)

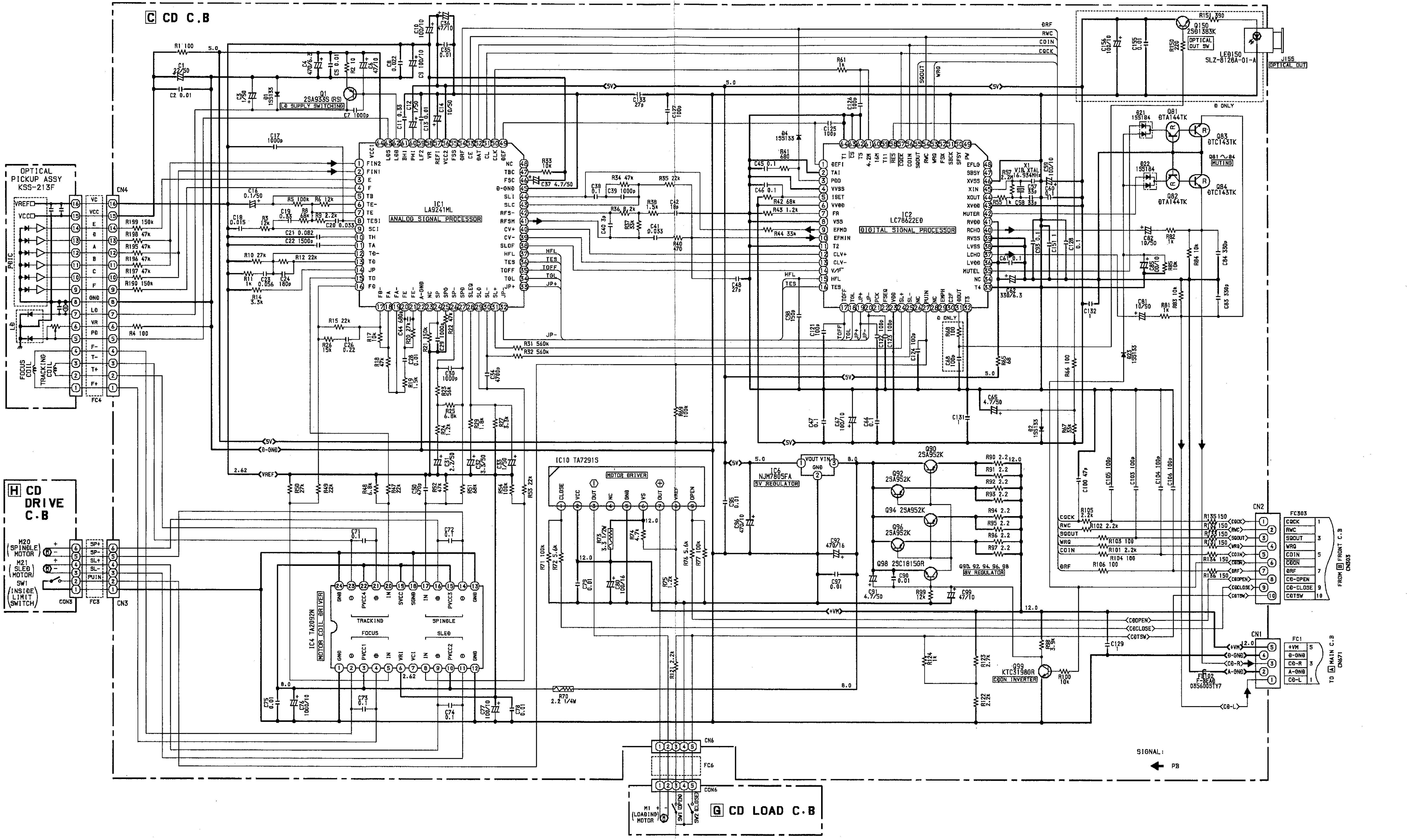

B FRONT C.B
FL301
FL SVA-11MM23
(DISPLAY)
IC303
SPS-442-1-F
REMOTE SENSOR
GND OUT VCC
CN301
FROM A MAIN C.B CN202
MD/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLLCE
CLK
DATA
D-POWER
MUTE
BIAS
QSNDON
REC/PB
D.GND
TU-ON
D.GND
HOLD
D.GND
SIG(NC)
D.GND
+VM
D.GND
V-ECO
ECO
TU/IFC
NC
TMBASE
-VFL
GND
EZ ONLY
CD OPEN/CLOSE S318
QSOUND S316
JOG MODE S314
REC/REC MUTE S312
CLEAR S310
SET S308
DIR/PRESET S306
TUNER/BAND S304
AUX/VIDEO S302
CD S317
TUNING S315
TUNING S313
TAPE/REV MODE S311
TIMER S309
SLEEP S307
ENTER S305
S303
POWER/ STANDBY/ON S301
※ S303 DEMO/ECO :EXCEPT EZ
S303 RDS/DEMO/ECO :EZ ONLY
IC301
M38B57MCH-P226F <HE>
M38B57MC-P218FP<EXCEPT HE>
SYSTEM CONTROL
Q309 2SA1162Y KSCAN
Q323 1SS133
S351
SW, RTRYEC16B24204 ENCORDER
VOLUME MULTI JOG
POWER/ STANDBY/ON
LED301 SLR-342VR RED
Q312 2SC2712GR
Q313 DTC114EK
Q312, 313 LED SWITCHING
Q302 2SA1296GR MOTOR DRIVER
Q301 DTC114ES MOTOR DRIVER
Q303 2SA1296GR SOLENOID DRIVER
LED302～LED305
LED SLR-56PT-T31-W GRN
CD AUX/VIDEO TUNER/BAND TAPE/REV MODE
Q304 2SC2712GR
Q305 2SC2712GR
Q306 2SC2712GR
Q307 2SC2712GR
Q304～307 LED SWITCHING
Q322 1SS184
Q316 MTZJ5.6B
Q318 1SS133
Q310 2SK2541 RESET
Q311 2SC2712GR CLOCK SHIFT
X301 VIB,CER 4.194MHz
FC303
CQCK
RWC
SQOUT
WRQ
COIN
CBON
DRF
CD-OPEN
CD-CLOSE
CDTSW
CN303
TO C CD C.B CN2
E DECK C.B
TAPE MECHANISM
IC1 DN6851 AUTO STOP
SW2 (RECB)
SW3 (RECA)
SW5 (CST)
SOL2
SW6 (STOP)
SFR1 3.3K
R2 3.9K
TAPE SPEED ADJ
CON1
CN302
RECB
RECA
MD+B
CST
GND
AS
PL
STOP
W1
M1 (DECK MOTOR)

WIRING – 3 (FRONT / DECK / REALY)



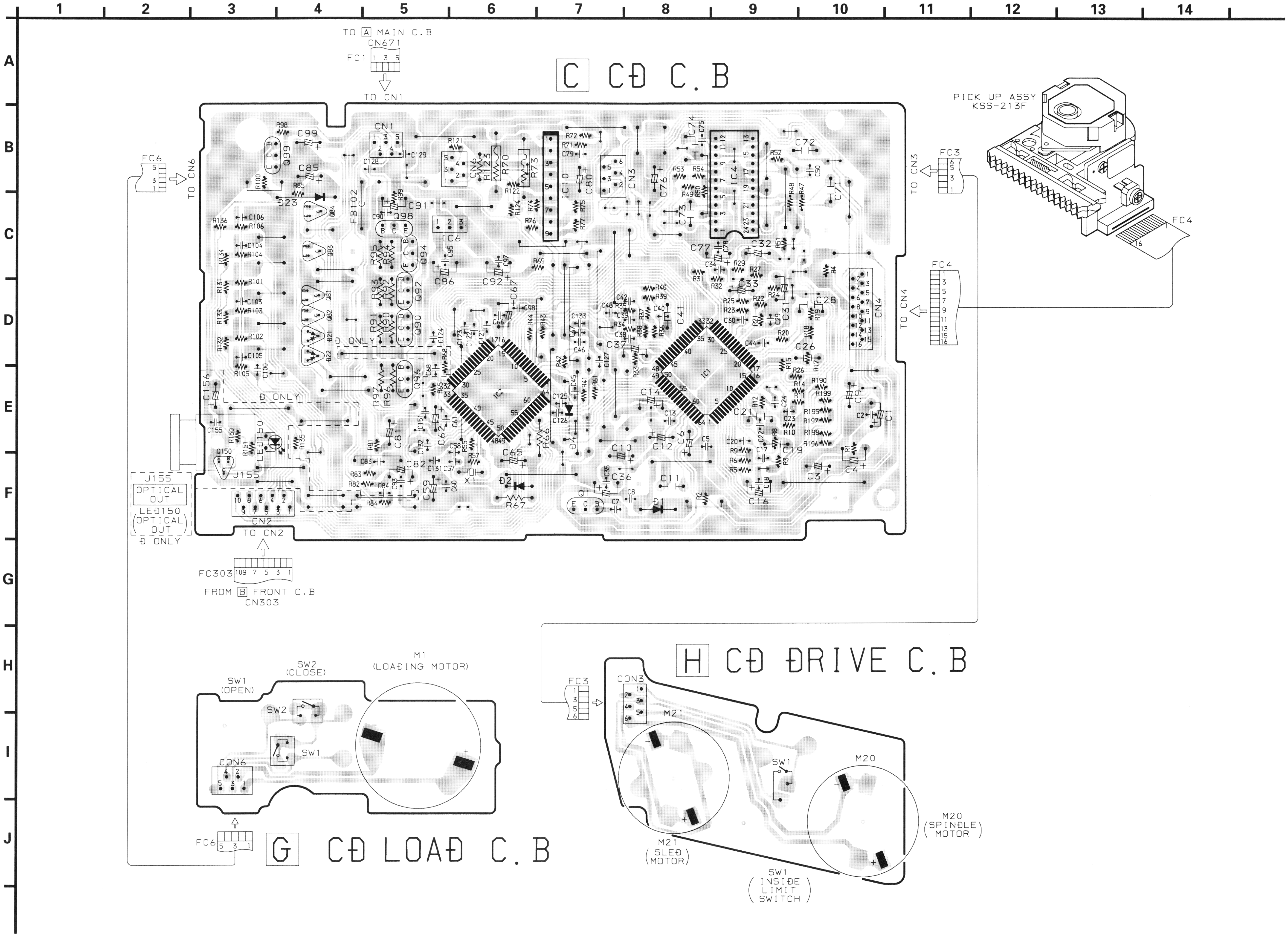
B FRONT C.B
FL301 (DISPLAY)
S318 CD ▲ OPEN/CLOSE
TO C CD C.B CN2
FC303
CN303
LED301 S301 POWER/ ⏻STANDBY/ON
FROM A MAIN C.B CN202
CN301
IC301
X301
S316 QSOUND
S351 VOLUME/ MULTI JOG
S314 JOG MODE
IC303 (REMOTE SENSOR)
CN302
TO E DECK C.B CON1
LED303 S302 AUX/VIDEO
LED304 S304 TUNER/BAND
LED305 S311 TAPE/REV MODE
S303 DEMO/ECO EXCEPT EZ
S303 RDS/DEMO/ECO EZ ONLY
S306 ◀▶DIR/PRESET
S309 TIMER
S315 ▶▶/∧TUNING ▶▶|
S313 ◀◀/|◀◀ TUNING ∨
S307 SLEEP
LED302 S317 CD
S312 ●REC/ REC MUTE
S310 ■CLEAR
S308 ❚❚SET
S305 ENTER
E DECK C.B
SW2 (REC B)
SW6 (STOP)
SW5 (CST)
FROM B FRONT C.B CN302
SW3 (REC A)
CON1
SFR1
R2
IC1
M1 (DECK MOTOR)
SOL2
W1
F RELAY C.B
TO A MAIN C.B CN351
CN301
BLK WHT GRY YEL RED BLU BRN
RPEH

SCHEMATIC DIAGRAM – 5 (CD / CD LOAD / CD DRIVE)

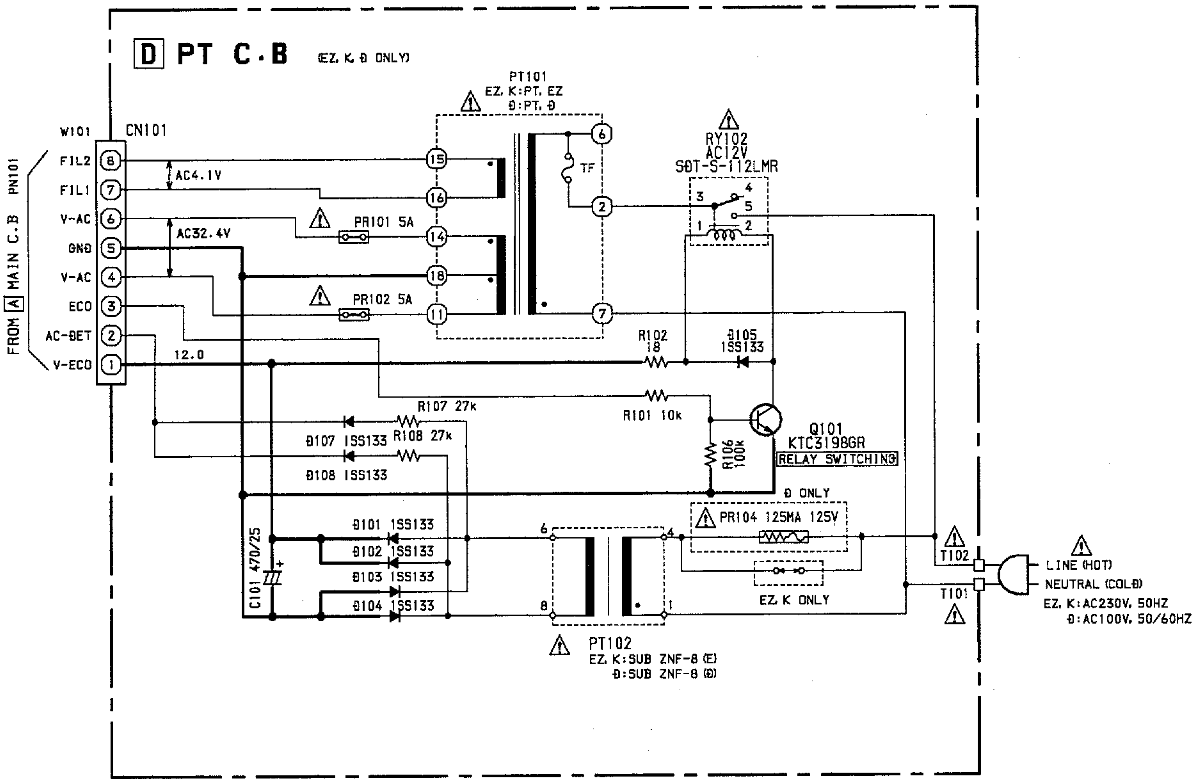


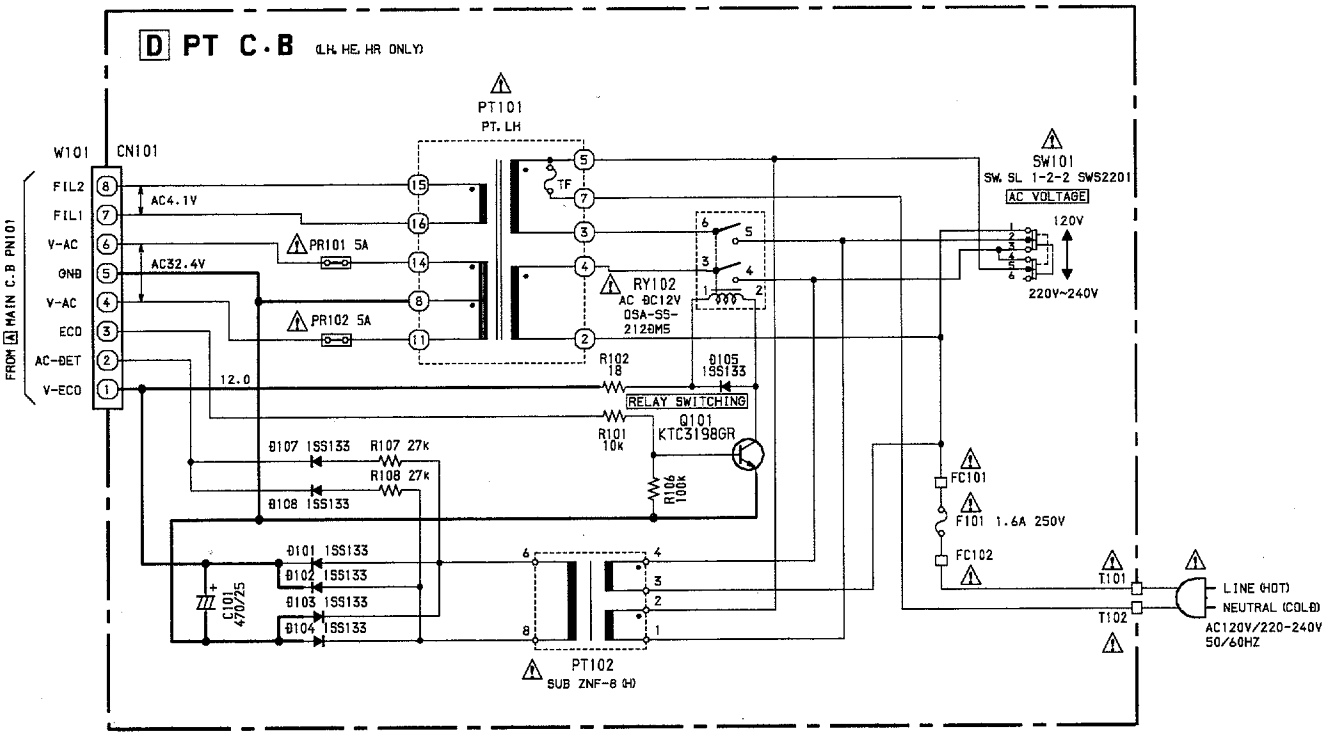
C CD C.B
OPTICAL PICKUP ASSY KSS-213F
PDIC
LD
FOCUS COIL
TRACKING COIL
VREF
VCC
CN4
FC4
IC1 LA9241ML
ANALOG SIGNAL PROCESSOR
IC2 LC78622ED
DIGITAL SIGNAL PROCESSOR
Q1 2SA933S (RS)
LD SUPPLY SWITCHING
D1 1SS133
X1 VIB XTAL 16.934MHz
IC6 NJM7805FA
5V REGULATOR
IC10 TA7291S
MOTOR DRIVER
IC4 TA2092N
MOTOR COIL DRIVER
TRACKING
SPINDLE
FOCUS
SLED
Q90 2SA952K
Q92 2SA952K
Q94 2SA952K
Q96 2SA952K
Q98 2SC1815GR
Q90, 92, 94, 96, 98 8V REGULATOR
Q99 KTC3198GR
CDON INVERTER
Q150 2SD1383K
OPTICAL OUT SW
LED150 SLZ-8128A-01-A
J155 OPTICAL OUT
Q81 DTA144TK
Q82 DTA144TK
Q83 DTC143TK
Q84 DTC143TK
Q81 ~ 84 MUTING
D21 1SS184
D22 1SS184
H CD DRIVE C.B
M20 SPINDLE MOTOR
M21 SLED MOTOR
SW1 INSIDE LIMIT SWITCH
CON3
FC3
CN3
CN6
FC6
CON6
G CD LOAD C.B
M1 LOADING MOTOR
SW1 OPEN
SW2 CLOSE
CN2
FC303
CQCK
RWC
SQOUT
WRQ
COIN
CDON
ØRF
CD-OPEN
CD-CLOSE
CDTSW
FROM B FRONT C.B CN303
CN1
FC1
+VM
D-GND
CD-R
A-GND
CD-L
TO A MAIN C.B CN671
FB102 F-BEAD 0356005TY7
R70 2.2 1/4W
SIGNAL:
PB

WIRING – 4 (CD / CD LOAD / CD DRIVE)


C CD C.B
TO A MAIN C.B CN671
FC1
TO CN1
PICK UP ASSY KSS-213F
FC4
FC3
TO CN3
TO CN4
FC6
TO CN6
IC1
IC2
IC4
IC6
IC10
CN1
CN2
CN3
CN4
CN6
FB102
Q99
Q98
Q94
Q92
Q90
Q96
Q150
Q1
X1
LED150
J155
D ONLY
J155 OPTICAL OUT
LED150 (OPTICAL OUT) D ONLY
TO CN2
FC303
FROM B FRONT C.B CN303
H CD DRIVE C.B
FC3
CON3
M21
SW1
M20
M21 (SLED MOTOR)
M20 (SPINDLE MOTOR)
SW1 (INSIDE LIMIT SWITCH)
SW1 (OPEN)
SW2 (CLOSE)
M1 (LOADING MOTOR)
SW2
SW1
CON6
FC6
G CD LOAD C.B

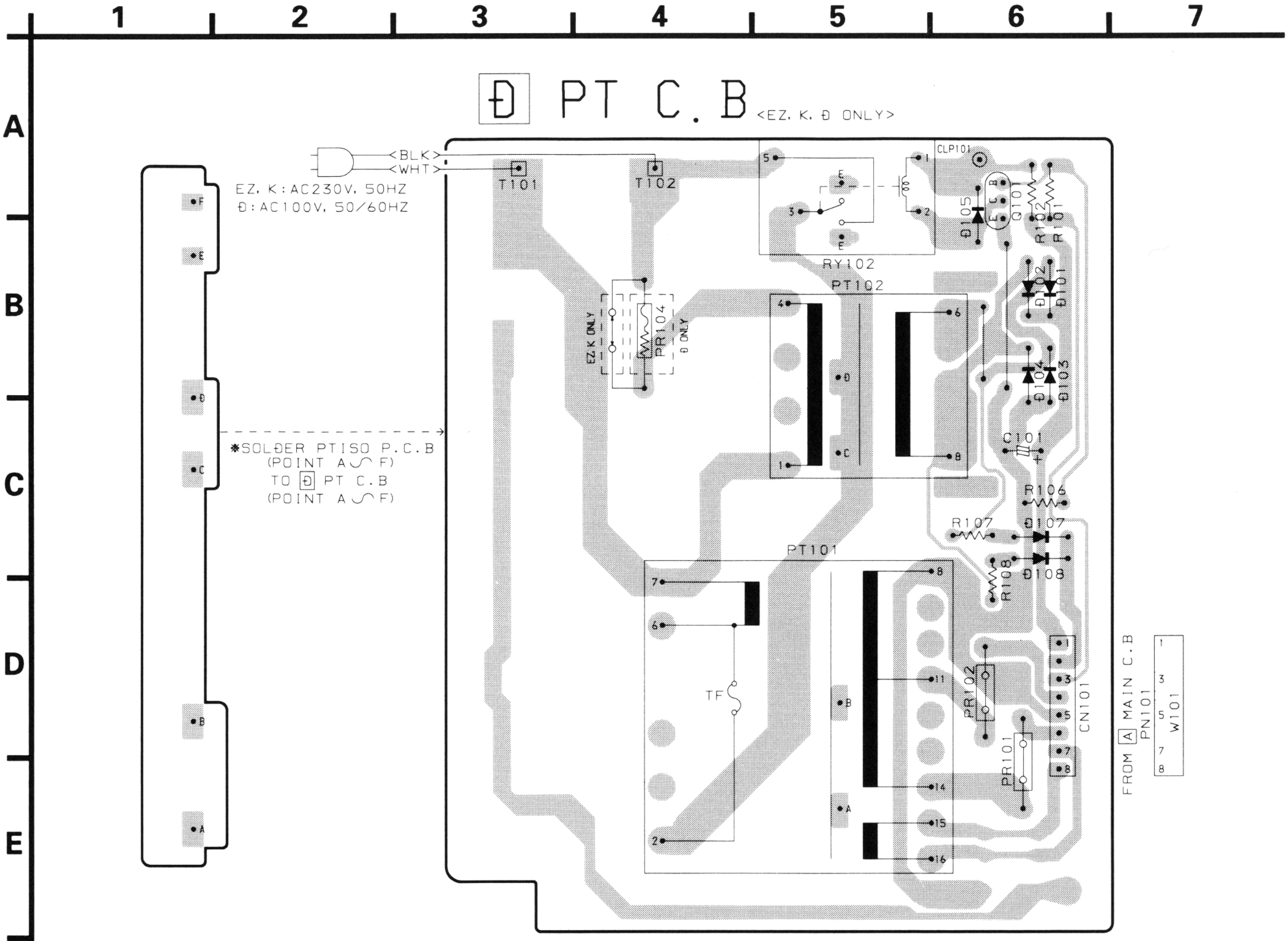
SCHEMATIC DIAGRAM – 6 (PT)


D PT C·B (EZ, K, Ð ONLY)
PT101
EZ, K: PT, EZ
Ð: PT, Ð
RY102
AC12V
SDT-S-112LMR
W101
CN101
FROM A MAIN C.B PN101
FIL2
FIL1
V-AC
GND
V-AC
ECO
AC-DET
V-ECO
AC4.1V
AC32.4V
PR101 5A
PR102 5A
TF
12.0
R102 18
D105 1SS133
R107 27k
R101 10k
D107 1SS133
R108 27k
D108 1SS133
Q101
KTC3198GR
RELAY SWITCHING
R106 100k
Ð ONLY
PR104 125MA 125V
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
C101 470/25
EZ, K ONLY
T102
T101
LINE (HOT)
NEUTRAL (COLD)
EZ, K: AC230V, 50HZ
Ð: AC100V, 50/60HZ
PT102
EZ, K: SUB ZNF-8 (E)
Ð: SUB ZNF-8 (D)

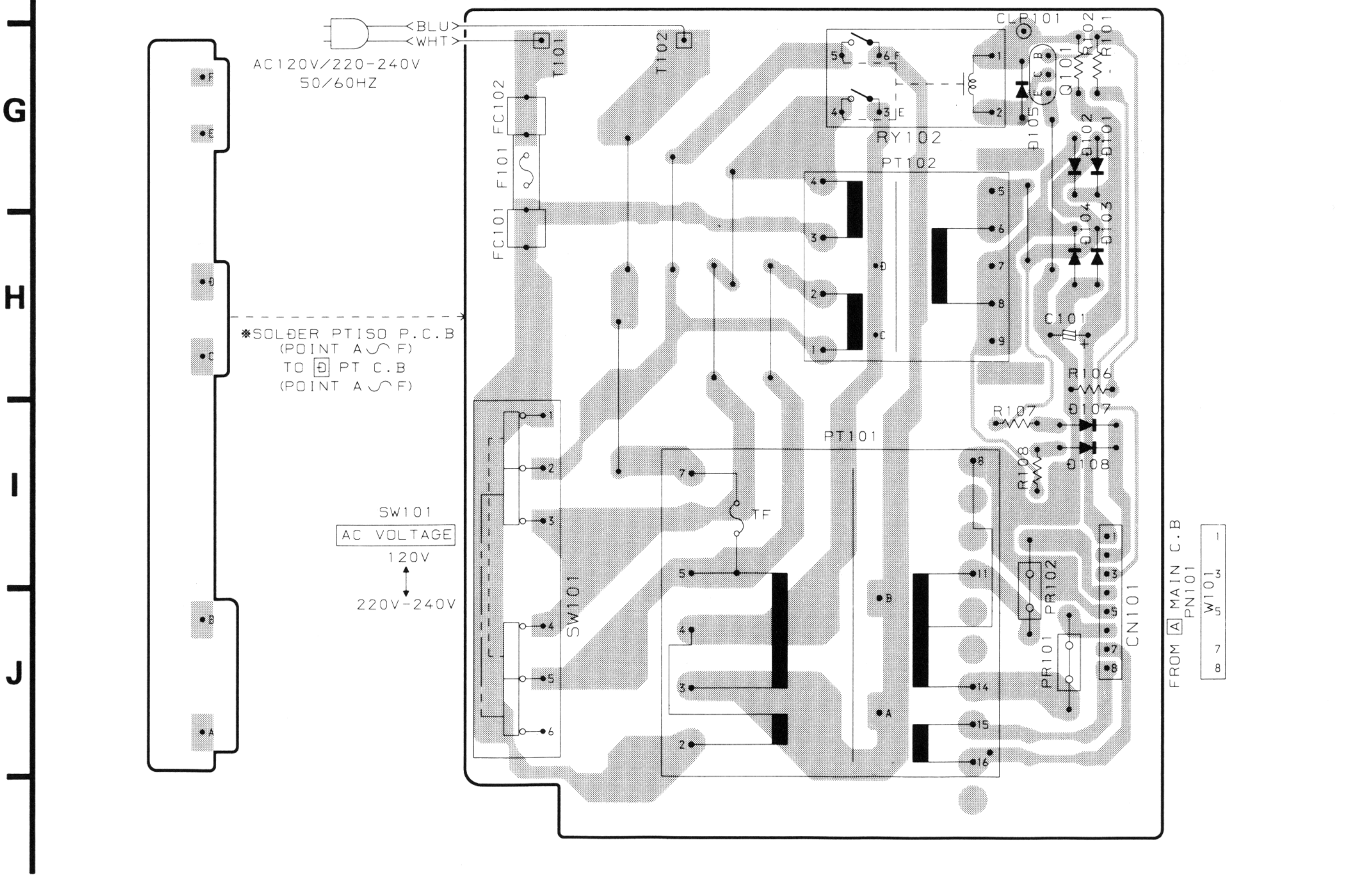

D PT C·B (LH, HE, HR ONLY)
PT101
PT, LH
W101
CN101
FROM A MAIN C.B PN101
FIL2
FIL1
V-AC
GND
V-AC
ECO
AC-DET
V-ECO
AC4.1V
AC32.4V
PR101 5A
PR102 5A
TF
RY102
AC DC12V
DSA-SS-212DMS
SW101
SW, SL 1-2-2 SWS2201
AC VOLTAGE
120V
220V~240V
12.0
R102 18
D105 1SS133
RELAY SWITCHING
R101 10k
Q101
KTC3198GR
R106 100k
D107 1SS133
R107 27k
R108 27k
D108 1SS133
FC101
F101 1.6A 250V
FC102
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
C101 470/25
T101
T102
LINE (HOT)
NEUTRAL (COLD)
AC120V/220-240V
50/60HZ
PT102
SUB ZNF-8 (H)

WIRING – 5 (PT)

Đ PT C.B <EZ, K, Đ ONLY>

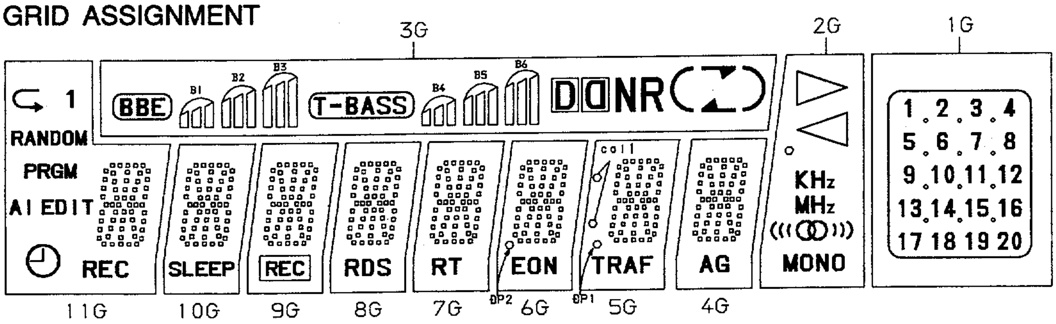

1
2
3
4
5
6
7
A
B
C
D
E
<BLK>
<WHT>
EZ, K:AC230V, 50HZ
Đ:AC100V, 50/60HZ
T101
T102
CLP101
RY102
PT102
PT101
PR104
EZ, K ONLY
Đ ONLY
Đ105
Q101
R102
R101
Đ102
Đ101
Đ104
Đ103
C101
R106
R107
Đ107
Đ108
R108
PR102
PR101
CN101
TF
✱SOLDER PTISO P.C.B
(POINT A∽F)
TO Đ PT C.B
(POINT A∽F)
FROM A MAIN C.B
PN101
W101

Đ PT C.B <LH, HE, HR ONLY>

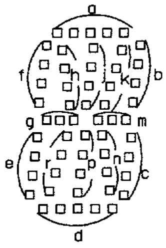

F
G
H
I
J
<BLU>
<WHT>
AC120V/220-240V
50/60HZ
T101
T102
FC102
F101
FC101
CLP101
RY102
PT102
PT101
Q101
R102
R101
Đ105
Đ102
Đ101
Đ104
Đ103
C101
R106
R107
Đ107
Đ108
R108
PR102
PR101
CN101
TF
SW101
SW101
AC VOLTAGE
120V
220V-240V
✱SOLDER PTISO P.C.B
(POINT A∽F)
TO Đ PT C.B
(POINT A∽F)
FROM A MAIN C.B
PN101
W101

FL (SVA-11MM23) GRID ASSIGNMENT / ANODE CONNECTION / PIN CONNECTION

GRID ASSIGNMENT

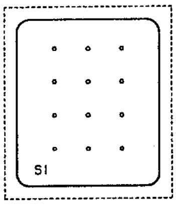


3G
2G
1G
↪ 1
RANDOM
PRGM
AI EDIT
REC
BBE
B1
B2
B3
T-BASS
B4
B5
B6
DDNR
SLEEP
REC
RDS
RT
EON
col
TRAF
AG
KHz
MHz
((ꝏ))
MONO
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
11G
10G
9G
8G
7G
DP2
6G
DP1
5G
4G



a
b
c
d
e
f
g
h
j
k
m
n
p
r

(11G-4G)



(1G)

ANODE CONNECTION

	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	REC	SLEEP	REC	RDS	RT	EON	TRAF	AG	BBE	MONO	20
P2	d	d	d	d	d	d	d	d	B1	((ꝏ))	19
P3	n	n	n	n	n	n	n	n	B2	MHz	18
P4	p	p	p	p	p	p	p	p	B3	KHz	17
P5	r	r	r	r	r	r	r	r	T-BASS	◦	16
P6	e	e	e	e	e	e	e	e	B4	▷	15
P7	c	c	c	c	c	c	c	c	B5	◁	14
P8	g	g	g	g	g	g	g	g	B6	—	13
P9	m	m	m	m	m	m	m	m	DDNR	—	12
P10	f	f	f	f	f	f	f	f	(	—	11
P11	b	b	b	b	b	b	b	b	⇄	—	10
P12	k	k	k	k	k	k	k	k	)	—	9
P13	j	j	j	j	j	j	j	j	—	—	8
P14	h	h	h	h	h	h	h	h	—	—	7
P15	a	a	a	a	a	a	a	a	—	—	6
P16	RANDOM	—	—	—	—	—	col(up)	—	—	—	5
P17	🕘	—	—	—	—	—	col(down)	—	—	—	4
P18	1	—	—	—	—	DP2	DP1	—	—	—	3
P19	PRGM	—	—	—	—	—	—	—	—	—	2
P20	A1	—	—	—	—	—	—	—	—	—	1
P21	EDIT	—	—	—	—	—	—	—	—	—	S1
P22	↪	—	—	—	—	—	—	—	—	—	—

PIN CONNECTION

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
CONNECTION	F1	F1	NP	NP	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	NC	NC

PIN NO.	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
CONNECTION	NC	NC	P5	P4	P3	P2	P1	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F2	F2

NOTES:

1.F1, F2 --------- FILAMENT 3. P1∼P22 --------- ANODE 5. NC --------- NO CONNECTION

2.1G∼11G --------- GRID 4. NP --------- NO PIN

IC DESCRIPTION <D>

IC, M38B57MC-P218FP / M38B57MCH-P226F

端子番号	端子名称	I/O	機能説明
1	I-VOL	I	ロータリーエンコーダーボリュームA/D入力。
2	I-RDS-SIG	I	RDSチューニングレベルA/D入力。
3	I-$\overline{\mathrm{HOLD}}$	I	システムホールド入力A/D入力。
4	I-SW-TP	I	カセット検出スイッチA/D入力。
5	I-KEY2	I	キー2A/D入力。
6	I-KEY1	I	キー1A/D入力。
7	O-$\overline{\mathrm{CSHIFT}}$	O	マイコンクロックシフト出力。
8	O-LED-AUX	O	AUXファンクションLED ON/$\overline{\mathrm{OFF}}$出力。
9	I-RMC	I	リモコンデータ入力。
10	I-$\overline{\mathrm{RESET}}$	I	マイコンリセット入力。
11	O-LED-TU	O	チューナーファンクションLED ON/$\overline{\mathrm{OFF}}$出力。
12	O-$\overline{\mathrm{TU\text{-}ON}}$	O	チューナーモードオン出力。
13	VSS	I	GND。
14	XIN	I	4.19MHzセラロック。
15	XOUT	O	4.19MHzセラロック。
16	VDD	I	電源。
17	O-$\overline{\mathrm{SOL}}$	O	デッキソレノイド$\overline{\mathrm{ON}}$/OFF出力。
18	O-$\overline{\mathrm{REC}}$/PB	O	デッキ録 $\overline{\mathrm{REC}}$/PB 生選択出力。
19	O-QSND	O	Qサウンドチップイネーブル出力。
20	O-BIAS	O	録音85kHz発振子$\overline{\mathrm{ON}}$/OFF出力。
21	O-MUTE	O	ミュート出力。
22	I-WRQ/RDCL	I	CD WRQ入力・RDSクロック入力。
23	O-$\overline{\mathrm{POWER}}$	O	パワー$\overline{\mathrm{ON}}$/OFFコントロール出力。
24	O-LED-TP	O	テープファンクションLED ON/$\overline{\mathrm{OFF}}$出力。
25	O-DATA	O	コモンシリアルデータ出力。
26	O-CLK	O	コモンシリアルクロック出力。
27	O-$\overline{\mathrm{KSCAN}}$	O	キースキャン出力。
28	VEE	I	–VFL。
29	O-PLL-CE	O	PLLチップイネーブル出力。
30	O-MOTOR	O	デッキモーターON/$\overline{\mathrm{OFF}}$コントロール出力。
31	O-$\overline{\mathrm{RECMUTE}}$	O	録音ミュート出力。
32~42	O-G1~O-G11	O	FLグリッドG1~G11出力。
43~56	O-P1~O-P14	O	FLポートP1~P14出力。
57	O-P15/I-OIRT	O/I	FLポートP15出力・OIRTダイオード検出入力。
58	O-P16/I-RDS	O/I	FLポートP16出力・RDSダイオード検出入力。
59	O-P17/I-AMST	O/I	FLポートP17出力・AMステレオダイオード検出入力。
60	O-P18/I-LW	O/I	FLポートP18出力・LWダイオード検出入力。
61	O-P19/I-SW	O/I	FLポートP19出力・SWダイオード検出入力。

端子番号	端子名称	I/O	機能説明
62	O-P20/I-AM10K	O/I	FLポートP20出力・AM 10k設定ダイオード検出入力。
63	O-P21/I-AS	O/I	FLポートP21出力・オートストップ信号入力。
64	O-P22/I-STOP	O/I	FLポートP22出力・デッキストップ信号入力。
65	O-LED-MD	O	MDファンクションLED ON/$\overline{\text{OFF}}$出力。
66	O-$\overline{\text{ECO}}$	O	エコノミーモード。
67	O-LED-CD	O	CDファンクションLED ON/$\overline{\text{OFF}}$出力。
68	I-TM-BASE	I	タイムベースクロック（8Hz）入力。
69	O-$\overline{\text{CDON}}$	O	CD $\overline{\text{ON}}$/OFFコントロール出力。
70	O-CQCK	O	CDクロック出力。
71	O-RWC/I-RDDA	O/I	CDコントロールデータ出力・RD5データ入力。
72	I-$\overline{\text{TU}}$/IFC/SQOUT	I	チューナー$\overline{\text{TUNE}}$, IPC入力・CD SQOUT入力。
73	AVSS	I	アナログGND。
74	VREF	I	基準電圧入力。
75	I-$\overline{\text{ST}}$/I-DRF	I	チューナーステレオ入力・CD DRF入力。
76	O-CD-OPEN	O	CDトレイオープン出力。
77	O-CD-CLOSE	O	CDトレイクローズ出力。
78	I-CDTSW	I	CDトレイスイッチA/D入力。
79	O-COIN	O	CD DSP出力へコマンド。
80	I-JOG	I	JOGアナログ入力。（未使用）

IC, LA9241ML

端子番号	端子名称	I/O	機能説明
1	FIN2	I	ピックアップのフォトダイオード接続用ピン。FIN1ピンとの加算でRF信号を生成し、減算でFE 信号を生成する。
2	FIN1	I	ピックアップのフォトダイオード接続用ピン。
3	E	I	ピックアップのフォトダイオード接続用ピン。Fピンとの減算でTE信号を生成する。
4	F	I	ピックアップのフォトダイオード接続用ピン。
5	TB	I	TE信号のDC成分入力用ピン。
6	TE –	I	TE信号のゲイン設定用抵抗をTEピン間に接続するピン。
7	TE	O	TE信号出力ピン。
8	TESI	I	TES（TRACK ERROR SENSE）コンパレータ入力ピン。TE信号をバンドパスし、入力する。
9	SCI	I	ショック検出用入力ピン。
10	TH	I	トラッキングゲイン時定数設定用ピン。
11	TA	O	TAアンプ出力ピン。
12	TD–	I	トラッキング位相補償定数をTD、VRピン間で構成するためのピン。
13	TD	O	トラッキング位相補償定数用ピン。
14	JP	I	トラッキングジャンプ信号（キックパルス）振幅設定用ピン。
15	TO	O	トラッキング制御信号出力ピン。
16	FD	O	フォーカシング制御信号出力ピン。
17	FD –	I	フォーカシング位相補償定数をFD、FAピン間で構成するためのピン。
18	FA	O	フォーカシング位相補償定数をFD−、FA−ピン間で構成するためのピン。
19	FA –	I	フォーカシング位相補償定数をFA、FEピン間で構成するためのピン。
20	FE	O	FE 信号の出力ピン。
21	FE –	I	FE 信号のゲイン設定用抵抗をTEピン間に接続するピン。
22	AGND	–	アナログ信号用 GND。
23	NC	–	未使用端子。
24	SP	O	スピンドルアンプ入力。
25	SPG	I	スピンドル12cmモード時ゲイン設定用抵抗接続ピン。
26	SP –	I	SPDピンとともにスピンドル位相補償定数接続用ピン。
27	SPD	O	スピンドル制御信号出力ピン。
28	SLEQ	I	スレッド位相補償定数接続用ピン。
29	SLD	O	スレッド制御信号出力ピン。
30	SL –	I	マイコンからのスレッド送り信号入力ピン。
31	SL +		
32	JP –	I	DSP からのトラッキングジャンプ信号入力ピン。
33	JP +		
34	TGL	I	DSP からのトラッキングゲインコントロール信号入力ピン。TGL=" H "でゲインロー。
35	TOFF	I	DSP からのトラッキングオフコントロール信号入力ピン。TOFF=" H "でオフ。
36	TES	O	TES信号をDSPへ出力するピン。

端子番号	端子名称	I/O	機能説明
37	HFL	O	(HIGH FREQUENCY LEVEL)は、メインビームの位置がビット上か、ミラー上かの判断に利用される。
38	SLOF	I	スレッドサーボオフコントロール入力ピン。
39	CV－	I	DSPからのCLVエラー信号入力用ピン。
40	CV＋		
41	RFSM	O	RF出力ピン。
42	RFS－	O	RFSMピンとともにRFのゲイン設定及びEFM信号の3T補償定数設定用ピン。
43	SLC	O	(SLICE LEVEL CONTOROL)は、RF波形のDSPによるデータスライスのレベル を制御する出力ピン。
44	SLI	I	DSPによるデータスライスのレベルを制御するための入力ピン。
45	D-GND	－	デジタル系のGNDピン。
46	FSC	O	フォーカスサーチスムージングコンデンサ用出力ピン。
47	TBC	I	(Tracking Balance Control)EFバランス可変範囲用設定ピン。
48	NC	－	未使用端子。
49	DEF	O	ディスクのディフェクト検出出力ピン。
50	CLK	I	基準クロック入力ピン。DSPの4.23MHzが入力される。
51	CL	I	マイコンコマンドクロック入力ピン。
52	DAT	I	マイコンコマンドデータ入力ピン。
53	CE	I	マイコンコマンドチップイネーブル入力ピン。
54	DRF	O	(DETECT RF)RFレベル検出出力。
55	FSS	I	未使用端子。
56	VCC2	－	サーボ系。デジタル系用VCCピン。
57	REFI	－	基準電圧用パスコン接続用ピン。
58	VR	O	基準電圧出力ピン。
59	LF2	－	ディスクのディフェクト検出時定数設定用ピン。
60	PHI	－	RF信号のピークホールド用コンデンサ接続用ピン。
61	BHI	－	RF信号のボトムホールド用コンデンサ接続用ピン。
62	LDD	O	APC回路出力ピン。
63	LDS	I	APC回路入力ピン。
64	VCC1	－	RF系VCCピン。

IC, LC78622ED

端子番号	端子名称	I/O	機能説明
1	DEFI	I	ディフェクト検出信号（DEF）入力端子。
2	TAI	I	PLL 用テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
3	PDO	O	PLL 用外部VCO制御用位相比較出力端子。
4	VVSS	–	PLL 用内蔵VCO用接地端子。必ず0Vに接続すること。
5	ISET	I	PLL 用PDO出力の電流調整用抵抗接続端子。
6	VVDD	–	PLL 用内蔵VCO用電源端子。
7	FR	I	PLL 用VCO周波数レンジ調整用。
8	VSS	–	デジタル系接地端子。必ず0Vに接続すること。
9	EFMO	O	スライスレベルコントロール用 EFM信号出力端子。
10	EFMIN	I	スライスレベルコントロール用 EFM信号入力端子。
11	T2	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
12	CLV+	O	ディスクモータコントロール用出力。3値出力。
13	CLV–		
14	V / $\overline{P}$	O	ラフサーボ／位相制御の自動切り替えモニタ出力端子。"H "でラフサーボ、" L" で位相サーボ。
15	HFL	I	トラック検出信号入力端子。シュミット入力。
16	TES	I	トラッキング誤差信号入力端子。シュミット入力。
17	TOFF	O	トラッキング OFF 出力端子。
18	TGL	O	トラッキングゲイン切り替え用出力端子。" L "でゲインを上げる。
19	JP+	O	トラックジャンプコントロール用出力。3値出力。
20	JP –		
21	PCK	O	EFNデータ再生用クロックモニタ端子。位相ロック時、4.3218MHz。（未使用）
22	FSEQ	O	同期信号検出出力端子。EFM信号から検出した同期信号と内部生成の同期信号が一致した時に、" Hi "。（未使用）
23	VDD	–	デジタル系電源端子。
24	SL+	O	マイコンからのシリアルデータコマンドスレッド送り信号出力ピン。
25	SL –		
26	NC	–	未使用。
27	PUIN	I	CDピックアップインサイドリミットスイッチ。
28	NC	–	未使用。
29	EMPH	O	ディエンファシスモニタ端子。" H "の時ディエンファシス・ディスク再生中。（未使用）
30	C2F	O	C2フラグ出力端子。（未使用）
31	DOUT	O	デジタルOUT出力端子。（EIAJフォーマット）
32~33	T3~T4	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
34	NC	–	未使用端子。オープンで使用すること。（未使用）
35	MUTEL	O	Lチャネル1ビットDAC。Lチャネル用ミュート出力端子。
36	LVDD	–	Lチャネル1ビットDAC。Lチャネル用電源端子。
37	LCHO	O	Lチャネル1ビットDAC。Lチャネル出力端子。
38	LVSS	–	Lチャネル1ビットDAC。Lチャネル用接地端子。必ず0Vに接続すること。

端子番号	端子名称	I/O	機能説明
39	RVSS	–	Rチャンネル1ビットDAC。Rチャンネル用接地端子。必ず0Vに接続すること。
40	RCHO	O	Rチャンネル1ビットDAC。Rチャンネル出力端子。
41	RVDD	–	Rチャンネル1ビットDAC。Rチャンネル用電源端子。
42	MUTER	O	Rチャンネル1ビットDAC。Rチャンネル用ミュート出力端子。
43	XVDD	–	水晶発振用電源端子。
44	XOUT	O	16.934MHz水晶振動子の接続端子。
45	XIN	I	
46	XVSS	–	水晶発振用接地端子。必ず0Vに接続すること。
47	SBSY	O	サブコードブロックの同期信号出力端子。（未使用）
48	EFLG	O	C1, C2, 1重、2重の訂正モニタ端子。（未使用）
49	PW	O	サブコードP、Q、R、T、U、Wの出力端子。（未使用）
50	SFSY	O	サブコードフレーム同期信号出力端子。サブコードがスタンバイした時、立ち下がる。（未使用）
51	SBCK	I	サブコード読みだしクロック入力端子。シュミット入力。
52	FSX	O	水晶発振から分周した7.35kHz同期信号出力端子。（未使用）
53	WRQ	O	サブコードQ出力スタンバイ出力端子。
54	RWC	I	リード／ライト制御入力端子。シュミット入力。
55	SQOUT	O	サブコードQ出力端子。
56	COIN	I	マイコンからのコマンド入力端子。
57	$\overline{\text{CQCK}}$	I	コマンド入力取り込みクロックまたはSQOUTからサブコード取り出しクロック入力端子。シュミット入力。
58	$\overline{\text{RES}}$	I	LC78622Eリセット入力端子。電源投入時に、一旦"L"にする。
59	T11	O	テスト用出力端子。オープン（通常"L"出力）で使用すること。（未使用）
60	16M	O	16.9344MHz出力端子。（未使用）
61	4.2M	O	4.2336MHz出力端子。
62	T5	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
63	$\overline{\text{CS}}$	I	チップセレクト入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
64	T1	I	テスト用入力端子。プルダウン抵抗はない。必ず0Vに接続すること。

IC, LC72131D

<table>
<tr><th>端子番号</th><th>端子名称</th><th>I/O</th><th>機能説明</th></tr>
<tr><td>1</td><td>X-IN</td><td>I</td><td rowspan="2">水晶発振子（7.2MHz）を接続。</td></tr>
<tr><td>22</td><td>X-OUT</td><td>O</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>未使用。</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>IC 起動。“H” でアクティブ。</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>関連キーの作動時に CPU（M38B57MC-P218FP/M38B57MCH-P226F）からデジタルデータ入力。</td></tr>
<tr><td>5</td><td>CL</td><td>I</td><td>データ DI でクロックする。</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>CPU（M38B57MC-P218FP/M38B57MCH-P226F）へデジタルデータ出力。</td></tr>
<tr><td>7</td><td>T-BASE</td><td>O</td><td>時計用リファレンスクロック信号（8Hz）を出力。</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$ / BEAT</td><td>O</td><td>MONO/BEATスイッチ時 “H” を出力。</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / $\overline{\text{SW}}$</td><td>O</td><td>以下のように “L” または “H” を出力。
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$/SW</td><td>O</td><td>以下のように “L” または “H” を出力。
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<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>インターナルカウンターをコントロール。</td></tr>
<tr><td>12</td><td>IF-IN</td><td>I</td><td>ゼネラルパポーズカウンター入力。</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>選局時、“L” を受信。</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>未使用。</td></tr>
<tr><td>15</td><td>AM-IN</td><td>I</td><td>AM ローカル発振子周波信号を受信。</td></tr>
<tr><td>16</td><td>FM-IN</td><td>I</td><td>FM ローカル発振子周波信号を受信。</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>IC (+5V) へ電源供給。</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL チャージポンプ出力。</td></tr>
<tr><td>19</td><td>A-IN</td><td>I</td><td rowspan="2">PLL アクティブ低域フィルター用 MOS トランジスター。</td></tr>
<tr><td>20</td><td>A-OUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>GND。</td></tr>
</table>

IC DESCRIPTION <HE, HR, LH, EZ, K>

IC, M38B57MC-P218FP / M38B57MCH-P226F

Pin No.	Pin Name	I/O	Description
1	I-VOL	I	Rotary encoder volume A/D input.
2	I-RDS-SIG	I	RDS tuning level A/D input.
3	I-HOLD	I	System hold input A/D input.
4	I-SW-TP	I	Cassette detect switch A/D input.
5	I-KEY2	I	Key 2 A/D input.
6	I-KEY1	I	Key 1 A/D input.
7	O-$\overline{\text{CSHIFT}}$	O	Micon clock shift output.
8	O-LED-AUX	O	Aux function LED ON/$\overline{\text{OFF}}$ output.
9	I-RMC	I	Remote control data input.
10	I-$\overline{\text{RESET}}$	I	Micon reset input.
11	O-LED-TU	O	Tuner function LED ON /$\overline{\text{OFF}}$ output.
12	O-$\overline{\text{TU-ON}}$	O	Tuner mode on output.
13	VSS	I	Ground.
14	XIN	I	4.19MHz ceralock.
15	XOUT	O	4.19MHz ceralock.
16	VDD	I	Power supply.
17	O-$\overline{\text{SOL}}$	O	Deck solenoid $\overline{\text{ON}}$/OFF output.
18	O-$\overline{\text{REC}}$/PB	O	Deck $\overline{\text{Record}}$/Playback select output.
19	O-QSND	O	Qsound chip enable output.
20	O-BIAS	O	Record 85kHz oscillator ON/$\overline{\text{OFF}}$ output.
21	O-MUTE	O	Mute output.
22	I-WRQ/RDCL	I	CD WRQ input / RDS clock input.
23	O-$\overline{\text{POWER}}$	O	Power $\overline{\text{ON}}$/OFF control output.
24	O-LED-TP	O	Tape function LED ON/$\overline{\text{OFF}}$ output.
25	O-DATA	O	Common serial data output.
26	O-CLK	O	Common serial clock output.
27	O-$\overline{\text{KSCAN}}$	O	Key-scan output.
28	VEE	I	–VFL.
29	O-PLL-CE	O	PLL chip enable output.
30	O-MOTOR	O	Deck motor ON/$\overline{\text{OFF}}$ control output.
31	O-$\overline{\text{RECMUTE}}$	O	Record mute output.
32 ~ 42	O-G1 ~ O-G11	O	FL grid G1 ~ G11 output.
43 ~ 56	O-P1 ~ O-P14	O	FL port P1 ~ P14 output.
57	O-P15/I-OIRT	O/I	FL port P15 output / OIRT diode detect input.
58	O-P16/I-RDS	O/I	FL port P16 output / RDS diode detect input.
59	O-P17/I-AMST	O/I	FL port P17 output / AM stereo diode detect input.
60	O-P18/I-LW	O/I	FL port P18 output / LW diode detect input.
61	O-P19/I-SW	O/I	FL port P19 output / SW diode detect input.
62	O-P20/I-AM10K	O/I	FL port P20 output / AM 10k setting diode detect input.
63	O-P21/I-AS	O/I	FL port P21 output / Auto stop signal input.
64	O-P22/I-STOP	O/I	FL port P22 output / Deck stop signal input.

Pin No.	Pin Name	I/O	Description
65	O-LED-MD	O	MD function LED ON/$\overline{\text{OFF}}$ output.
66	O-$\overline{\text{ECO}}$	O	Economical mode.
67	O-LED-CD	O	CD function LED ON/$\overline{\text{OFF}}$ output.
68	I-TM-BASE	I	Time base clock (8Hz) input.
69	O-$\overline{\text{CDON}}$	O	CD $\overline{\text{ON}}$/OFF control output.
70	O-CQCK	O	CD clock output.
71	O-RWC/I-RDDA	O/I	CD control data output / RDS data input.
72	I-$\overline{\text{TU}}$/IFC/SQOUT	I	$\overline{\text{Tuner}}$ TUNE, IFC input / CD SQOUT input.
73	AVSS	I	Analogue ground.
74	VREF	I	Reference voltage input.
75	I-$\overline{\text{ST}}$/I-DRF	I	Tuner stereo input / CD DRF input.
76	O-CD-OPEN	O	CD tray open output.
77	O-CD-CLOSE	O	CD tray close output.
78	I-CDTSW	I	CD tray switch A/D input.
79	O-COIN	O	Command to CD DSP output.
80	I-JOG	I	JOG analog input. (Not used)

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Connects to the pickup's photo diode; adding this pin to pin FIN1 generates RF signal, and subtracting it generates FE signal.
2	FIN1	I	Connects to the pickup's photo diode.
3	E	I	Connects to the pickup's photo diode; subtracting this pin from pin F generates TE signal.
4	F	I	Connects to the pickup's photo diode.
5	TB	I	Input for DC component of TE signal.
6	TE–	I	Connects to the resistor between this pin and TE pin for setting the gain of TE signal.
7	TE	O	Output for TE signal.
8	TESI	I	Input for TES (Track Error Sense) comparator, TE signal is band-passed and inputted.
9	SCI	I	Input for shock detection.
10	TH	I	For setting tracking gain time constant.
11	TA	O	TA amplifier output pin.
12	TD–	I	For constructing tracking phase compensation constant between TD and VR pins.
13	TD	O	For setting tracking phase compensation.
14	JP	I	For setting the amplifier of tracking jump signal (kick pulse).
15	TO	O	Output for tracking control signal.
16	FD	O	Output for focusing control signal.
17	FD–	I	For constructing focusing phase compensation constant between FD and FA pins.
18	FA	O	For constructing focusing phase compensation constant between FD– and FA– pins.
19	FA–	I	For constructing focusing phase compensation constant between FA and FE pins.
20	FE	O	Output for FE signal.
21	FE–	I	Connects to the gain-setting resistor of FE signal between this pin and FE pin.
22	A-GND	–	GND for analog signals.
23	NC	–	Not connected.
24	SP	O	Single end output of CV+ and CV– pin input signal.
25	SPG	I	Connects to the gain-setting resistor during spindle 12cm mode.
26	SP–	I	Connects to spindle phase compensation constant together with SPD pin.
27	SPD	O	Output for spindle control signal.
28	SLEQ	I	Connects to sled phase compensation constant.
29	SLD	O	Output for sled control signal.
30	SL–	I	Input for sled-sending signal from microcontroller.
31	SL+	I	Input for sled-sending signal.
32	JP–	I	Input for tracking-jump signal from DSP.
33	JP+		
34	TGL	I	Input for tracking gain control signal from DSP; gain is low if TGL = "H".
35	TOFF	I	Input for tracking off control signal from DSP; off if TOFF = "H".
36	TES	O	Outputs TES signal to DSP.
37	HFL	O	HIGH FREQUENCY LEVEL; used to determine whether the main beam is on a pit or on a mirror.
38	SLOF	I	Input for sled servo off control.

Pin No.	Pin Name	I/O	Description
39	CV–	I	Input for CLV error signal from DSP.
40	CV+		
41	RFSM	O	Output for RF.
42	RFS–	O	For setting RF gain and 3T compensation constant together with RFSM.
43	SLC	O	SLICE LEVEL CONTROL; output for controlling the data slice level of DSP with RF waveform.
44	SLI	I	Input for controlling the data slice level of DSP.
45	D-GND	–	GND for digital system.
46	FSC	O	Output pin for focus search smoothing capacitor.
47	TBC	I	(Tracking Balance Control) EF balance variable range setting pin.
48	NC	–	Not connected.
49	DEF	O	Output for disk defect detection.
50	CLK	I	Standard clock input; DSP's 4.23MHz is inputted.
51	CL	I	Clock input for microcontroller command.
52	DAT	I	Data input for microcontroller command.
53	CE	I	Chip-enable input for microcontroller command.
54	DRF	O	Detect RF; output for RF level detection.
55	FSS	I	(Focus Search Mode) = search/+search against reference voltage switching pin. (Not used)
56	VCC2	–	VCC pin for servo and digital systems.
57	REFI	I	For connecting pass capacitor to reference voltage.
58	VR	O	Reference voltage output.
59	LF2	–	For setting disk defect-detection time constant.
60	PHI	–	Connects to capacitor for RF signal peak hold.
61	BHI	–	Connects to capacitor for RF signal bottom hold.
62	LDD	O	Output for APC circuit.
63	LDS	I	Input for APC circuit.
64	VCC1	–	VCC pin for RF system.

IC, LC78622ED

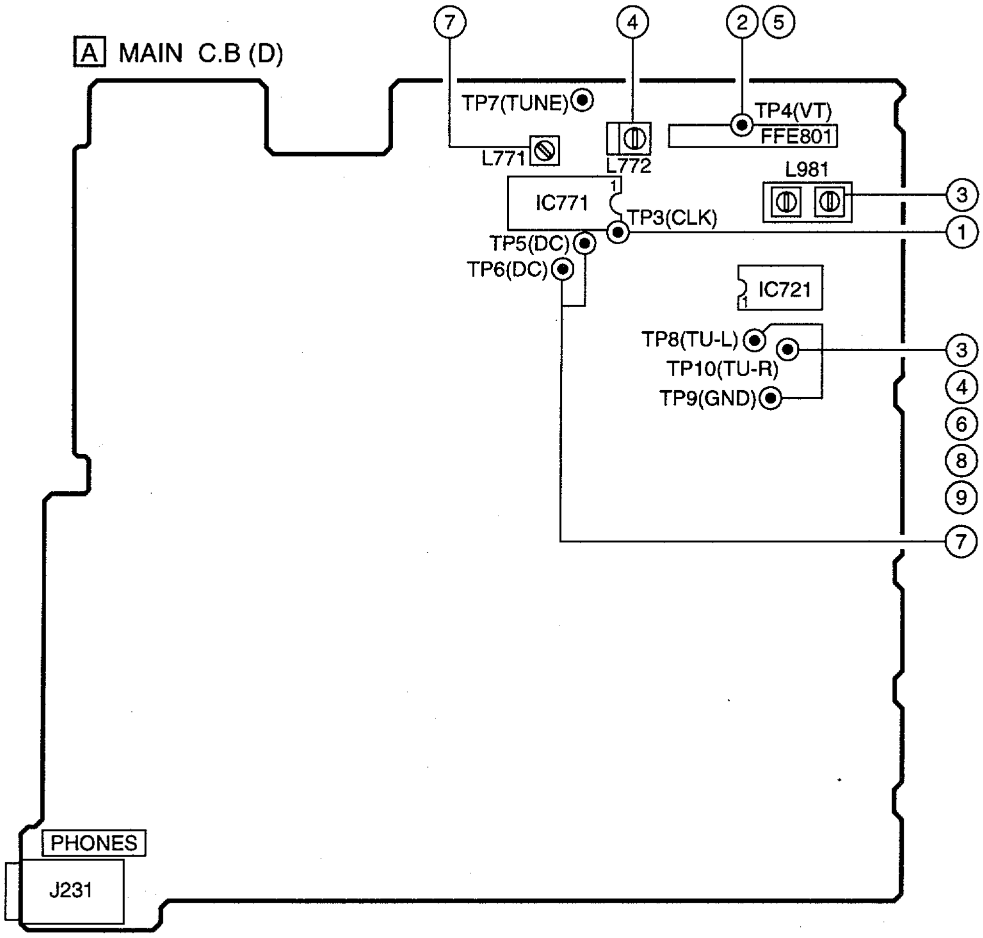
Pin No.	Pin Name	I/O	Description
1	DEFI	I	Defect detection signal (DEF) input.
2	TAI	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
3	PDO	O	External VCO control phase comparator output.
4	VVSS	–	Internal VCO ground. Must be connected to 0V.
5	ISET	O	PDO output current adjustment resistor connection.
6	VVDD	–	Internal VCO power supply.
7	FR	–	VCO frequency range adjustment.
8	VSS	–	Digital system ground. Must be connected to 0V.
9	EFMO	O	Slice level control; EFM signal output.
10	EFMIN	I	Slice level control; EFM signal input.
11	T2	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
12	CLV+	O	Disc motor control output. Three-value ouput is also possible when specified by microprocessor command.
13	CLV–		
14	V/$\overline{P}$	O	Rough servo/phase control automatic switching monitor output. Outputs a high level during rough servo and a low level during phase control.
15	HFL	I	Track detection signal input. This is a Schmitt input.
16	TES	I	Tracking error signal input. This is a Schmitt input.
17	TOFF	O	Tracking off output.
18	TGL	O	Tracking gain switching output. Increase the gain when low.
19	JP+	O	Track jump output. Three-value output is also possible when specified by microprocessor command.
20	JP–		
21	PCK	O	EFM data playback clock monitor. Outputs 4.3218 MHz when the phase is locked. (Not used)
22	FSEQ	O	Synchronization signal detection ouput. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not used)
23	VDD	–	Digital system power supply.
24	SL+	O	Serial data command sled signal output terminal from microprocessor.
25	SL–		
26	NC	–	Not used.
27	PU IN	I	CD pickup inside limit switch.
28	NC	–	Not used.
29	EMPH	O	De-emphasis monitor pin. A high level indicates playback of a de-emphasis disk. (Not used)
30	C2F	O	C2 flag output. (Not used)
31	DOUT	O	Digital output (EIAJ format).
32	T3	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
33	T4		
34	NC	–	Unused. Must be left open.
35	MUTEL	O	Left channel one-bit D/A converter mute output.
36	LVDD	–	Left channel one-bit D/A converter power supply.

Pin No.	Pin Name	I/O	Description
37	LCHO	O	Left channel one-bit D/A converter output.
38	LVSS	–	Left channel one-bit D/A converter ground. Must be connected to 0V.
39	RVSS	–	Right channel one-bit D/A converter ground. Must be connected to 0V.
40	RCHO	O	Right channel one-bit D/A converter output.
41	RVDD	–	Right channel one-bit D/A converter power supply.
42	MUTER	O	Right channel one-bit D/A converter mute ouput.
43	XVDD	–	Crystal oscillator power supply.
44	XOUT	O	Connections for a 16.934MHz crystal oscillator element.
45	XIN	I	
46	XVSS	–	Crystal oscillator ground. Must be connected to 0V.
47	SBSY	O	Subcode block synchronization signal output. (Not used)
48	EFLG	O	C1, C2 single and double error correction monitor pin. (Not used)
49	PW	O	Subcode P, Q, R, S, T, U, V and W output. (Not used)
50	SFSY	O	Subcode frame synchronization signal output. This signal falls when the subcode are in the standby state. (Not used)
51	SBCK	I	Subcode readout clock input. This is a Schmitt input. (Must be connected to 0V when unused)
52	FSX	O	Output for the 7.35 kHz synchronization signal divided from the crystal oscillator. (Not used)
53	WRQ	O	Subcode Q output standby output.
54	RWC	I	Readwrite control input. This is a Schmitt input.
55	SQOUT	O	Subcode Q output.
56	COIN	I	Command input from the control microprocessor.
57	$\overline{\text{CQCK}}$	I	Input for both the command input acquisition clock and the SQOUT pin subcode readout clock input. This is a Schmitt input.
58	$\overline{\text{RES}}$	I	Chip reset pin. This pin must be set low briefly after power is first applied.
59	T11	O	Test output. Leave open. (Normally outputs a low level). (Not used)
60	16M	O	16.9344 MHz output. (Not used)
61	4.2M	O	4.2336 MHz output.
62	T5	I	Test input. A pull-down resistor is built in. Must be connected to 0V.
63	$\overline{\text{CS}}$	I	Chip select input. A pull-down resistor is built in. Must be connected to 0V if not controlled.
64	T1	I	Test input. No pull-down resistor. Must be connected to 0V.

IC, LC72131D

<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>X-IN</td><td>I</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>X-OUT</td><td>O</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU (M38B57MC-P218FP / M38B57MCH-P226F) when relevant key is operated. Active "H".</td></tr>
<tr><td>5</td><td>CL</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (M38B57MC-P218FP / M38B57MCH-P226F)</td></tr>
<tr><td>7</td><td>T-BASE</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>$\overline{\text{MONO}}$ / BEAT</td><td>O</td><td>Outputs "H" when MONO / BEAT is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / $\overline{\text{SW}}$</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$ / SW</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IF-IN</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>15</td><td>AM-IN</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>FM-IN</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>A-IN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>A-OUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>Ground.</td></tr>
</table>

ADJUSTMENT – 1 <TUNER : D>



A MAIN C.B (D)
⑦
④
②⑤
TP7(TUNE)
TP4(VT)
FFE801
L771
L772
L981
③
IC771
TP3(CLK)
①
TP5(DC)
TP6(DC)
IC721
TP8(TU-L)
TP10(TU-R)
TP9(GND)
③
④
⑥
⑧
⑨
⑦
PHONES
J231

＜チューナー部＞

1. クロック周波数確認
設定 ：•テストポイント ：TP3(CLK)
方法 ：AM1602kHzに設定し、テストポイントが2052kHz ± 45Hzであることを確認する。

2. AM VT確認
設定 ：•テストポイント ：TP4(VT)
方法 ：AM1602kHz (AM 531kHz)に設定し、テストポイントが8.0V以下(0.6V以上)であることを確認する。

3. AMトラッキング調整
設定 ：•テストポイント ：TP8(TU-L)
TP9(GND)
TP10(TU-R)
•調整箇所 ：L981
方法 ：AM999kHzに設定し、テストポイントが最大になるようにL981を調整する。

4. AM IF調整
設定 ：•テストポイント ：TP8(TU-L)
TP9(GND)
TP10(TU-R)
L772 .... 450kHz

5. FM VT確認
設定 ：•テストポイント ：TP4(VT)
方法 ：FM108.0MHz(76.0MHz)に設定し、テストポイントが9.0V以下 (0.4V以上) であることを確認する。

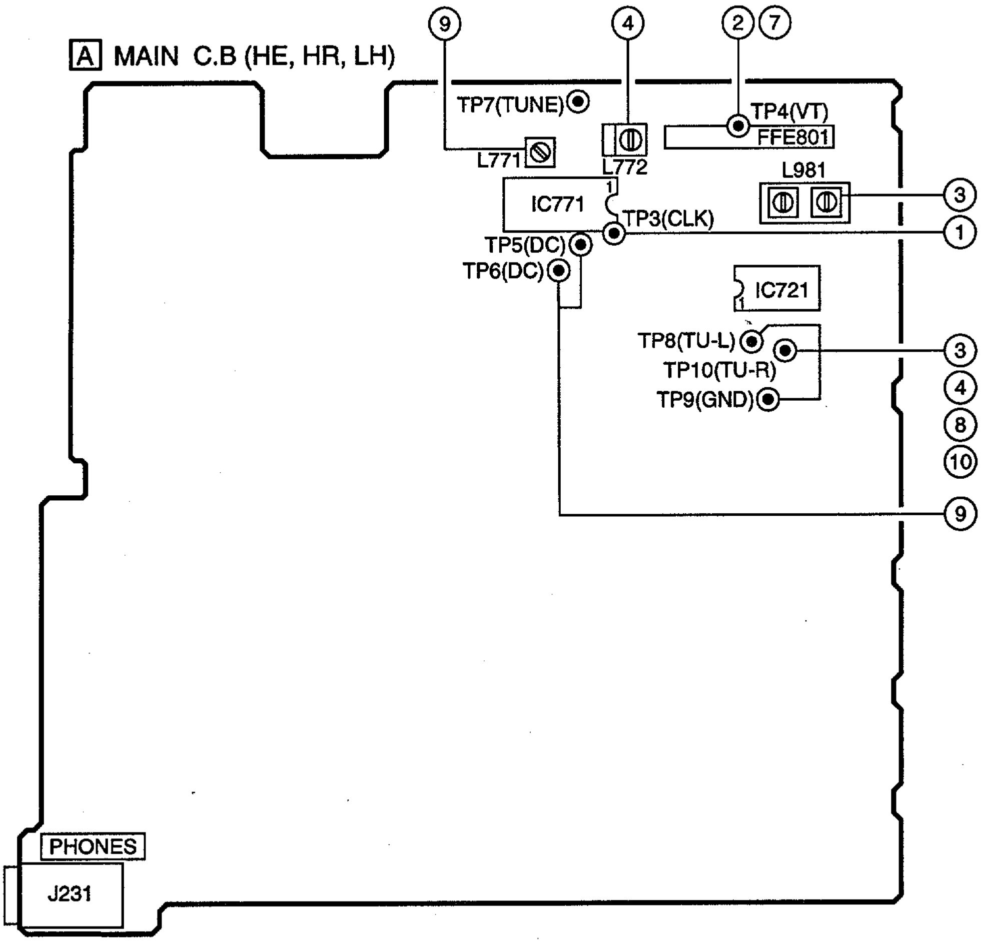
6. FMトラッキング確認
設定 ：•テストポイント ：TP8(TU-L)
TP9(GND)
TP10(TU-R)
方法 ：FM83.0MHzに設定し、テストポイントが8dB以下であることを確認する。

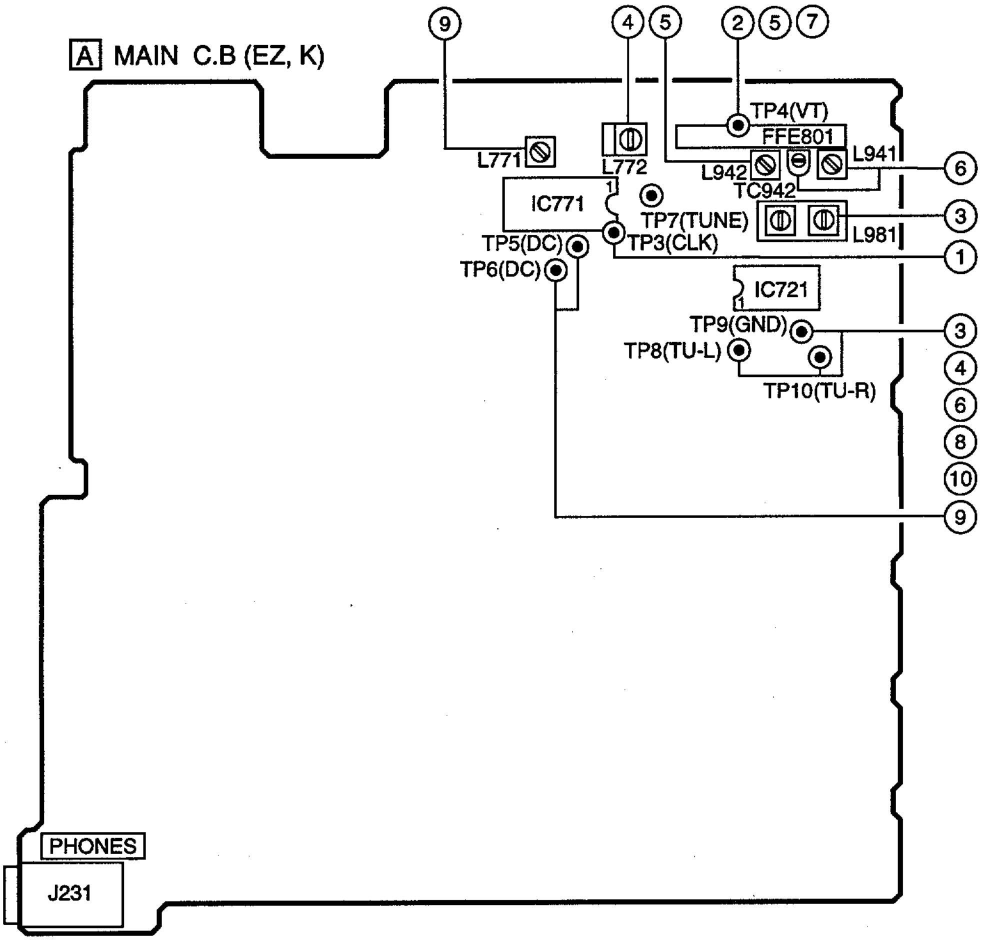
7. DCバランス・モノ歪率調整
設定 ：•テストポイント ：TP5(DC), TP6 (DC)
•調整箇所 ：L771
•入力レベル ：60dBuV
方法 ：FM83.0MHzに設定し、TP5とTP6間の電圧が0V ± 0.04VになるようにL771を調整する。次に、歪率が1.0%以下であることを確認する。

8. AMセパレーション確認
設定 ：•テストポイント ：TP8(TU-L)
TP9(GND)
TP10(TU-R)
•入力レベル ：74dBuV
方法 ：AM999kHzに設定し、テストポイントが15dB以上であることを確認する。

9. FMセパレーション確認
設定 ：•テストポイント ：TP8(TU-L)
TP9(GND)
TP10(TU-R)
•入力レベル ：60dBuV
方法 ：FM83.0MHzに設定し、テストポイントが25dB以上であることを確認する。

ADJUSTMENT – 2 <TUNER : HE, HR, LH, EZ, K>


A MAIN C.B (HE, HR, LH)
⑨
④
②⑦
TP7(TUNE)
TP4(VT)
FFE801
L771
L772
L981
③
IC771
TP3(CLK)
①
TP5(DC)
TP6(DC)
IC721
TP8(TU-L)
③
TP10(TU-R)
④
TP9(GND)
⑧
⑩
⑨
PHONES
J231


A MAIN C.B (EZ, K)
⑨
④⑤
②⑤⑦
TP4(VT)
FFE801
L771
L772
L942
L941
⑥
TC942
IC771
TP7(TUNE)
③
L981
TP5(DC)
TP3(CLK)
①
TP6(DC)
IC721
TP9(GND)
③
TP8(TU-L)
④
TP10(TU-R)
⑥
⑧
⑩
⑨
PHONES
J231

< TUNER SECTION >

1. Clock Frequency Check
Settings : • Test point : TP3 (CLK)
Method : Set to AM 1602kHz (HE, HR), AM 1710kHz (LH), MW 1602kHz (EZ, K) and check that the test point is 2052kHz ± 45Hz (HE, HR, EZ, K), 2160kHz ± 45Hz (LH).

2. AM (MW) VT Check
Settings : • Test point : TP4 (VT)
Method : Set to AM 1602kHz (HE, HR), AM 1710kHz (LH), MW 1602kHz (EZ, K) and check that the test point is less than 8.5V (HE, HR, LH), less than 8.0V (EZ, K). Then set to AM 531kHz (HE, HR), AM 530kHz (LH), MW 531kHz (EZ, K) and check that the test point is more than 0.3V (HE, HR), more than 0.6V (LH, EZ, K).

3. AM (MW) Tracking Adjustment
Settings : • Test point : TP8 (TU-L)
TP9 (GND)
TP10 (TU-R)
• Adjustment location :L981
Method : Set to AM 999kHz (HE, HR), AM 1000kHz (LH), MW 999kHz (EZ, K) and adjust L981 so that the test point becomes maximum.

4. AM (MW) IF Adjustment
Settings : • Test point : TP8 (TU-L)
TP9 (GND)
TP10 (TU-R)
L772 .... 450kHz

5. LW VT Adjustment <EZ, K>
Settings : • Test point : TP4 (VT)
• Adjustment location :L942
Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V ± 0.05V. Then set to LW 290kHz and check that the test point is less than 8.0V.

6. LW Tracking Adjustment <EZ, K>
Settings : • Test point : TP8 (TU-L)
TP9 (GND)
TP10 (TU-R)
• Adjustment location :
L941 .... 144kHz
TC942 .... 290kHz
Method : Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

7. FM VT Check
Settings : • Test point : TP4 (VT)
Method : Set to FM 108.0MHz (87.5MHz) and check that the test point is less than 8.0V (more than 0.5V).

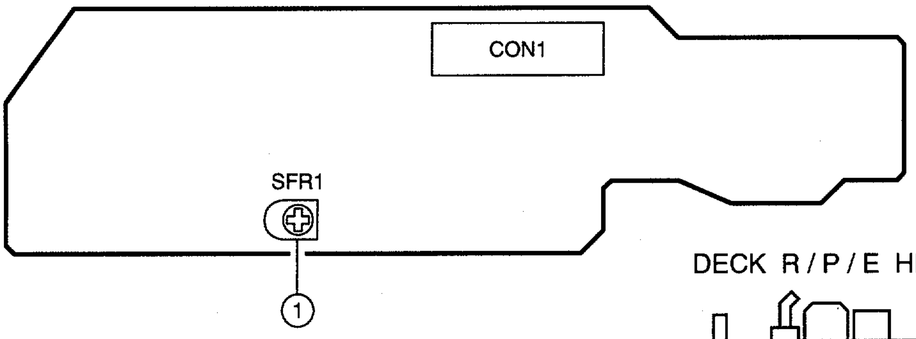
8. FM Tracking Check
Settings : • Test point : TP8 (TU-L)
TP9 (GND)
TP10 (TU-R)
Method : Set to FM 98.0MHz and check that the test point is less than 8dBuV (HE, HR, LH), less than 13dBuV (EZ, K).

9. DC Balance / Mono Distortion Adjustment
Settings : • Test point : TP5 (DC), TP6 (DC)
• Adjustment location :L771
• Input level : 60dBuV
Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP5 and TP6 becomes 0V ± 0.04V.
Next, check that the distortion is less than 1.0%.

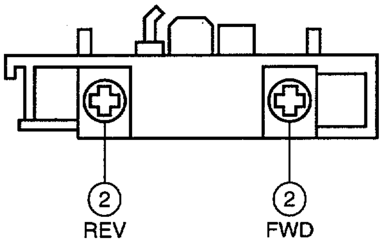
10. FM Separation Check
Settings : • Test point : TP8 (TU-L)
TP9 (GND)
TP10 (TU-R)
• Input level : 60dBuV
Method : Set to FM 98.0MHz and check that the test point is more than 25dB (HE, HR, LH), more than 12dB (EZ, K).

ADJUSTMENT – 3 <DECK>

E DECK C.B



DECK R / P / E HEAD



<デッキ部> (D)

1. テープスピード調整
設定 : •テストテープ : TTA-100
•テストポイント : SP-OUT2V
•調整箇所 : SFR1
方法 : テストテープを再生し、周波数カウンターが3000Hz ± 5Hz(FWD時)に、FWD PLAY速度 ± 45Hz(REV時) になるようSFR1を調整する。

2. ヘッドアジマス調整
設定 : •テストテープ : TTA-300
•テストポイント : SP-OUT2V
•調整箇所 : ヘッドアジマス調整ネジ
方法 : テストテープの8kHz信号を再生し、出力が最大なるようにネジを調整する。次に、FWD PLAYおよびREV PLAYモードも同様に調整する。

3. 再生周波数特性確認
設定 : •テストテープ : TTA-320
•テストポイント : SP-OUT2V
方法 : テストテープの315Hzと10kHz信号を再生し、315Hz信号に対して、10kHz信号が0dB ± 3dBであることを確認する。

4. 録再周波数特性確認
設定 : •テストテープ : TTA-602
•テストポイント : SP-OUT2V
方法 : -20VU信号をAUX端子に入力し、1kHzおよび10kHz信号を録音、再生し、録再出力差が0dB ± 3dBであることを確認する。

< DECK SECTION > (HE, HR, LH, EZ, K)

1. Tape Speed Adjustment
Settings : • Test tape : TTA–100
• Test point : SP–OUT 2V
• Adjustment location : SFR1
Method : Play back the test tape and adjust SFR1 for 3000Hz ± 5Hz (FWD) and FWD PLAY speed ± 45Hz (REV).

2. Head Azimuth Adjustment
Settings : • Test tape : TTA–300
• Test point : SP–OUT 2V
• Adjustment location : Head azimuth adjustment screw
Method : Play back the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

3. PB Frequency Response Check
Settings : • Test tape : TTA–320
• Test point : SP–OUT 2V
Method : Play back the 315Hz and 10kHz signals of the test tape and check that the 10kHz signal with respect to that of the 315Hz signal is 0dB ± 3dB.

4. REC/PB Frequency Response Check
Settings : • Test tape : TTA–602
• Test point : SP–OUT 2V
Method : Input a –20VU signal to the AUX terminal. Record the 1kHz and 10kHz signals on the test tape and play back them. Check that the difference between the record level and the play back level at 1kHz and 10kHz signal is 0dB to ± 3dB.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	Less than 8dBuV <D>
(THD 3%)	[at 76.0MHz / 83.0MHz / 108.0MHz] <D>
	Less than 10dBuV <HE, HR, LH>
	Less than 14dBuV <EZ, K>
	[at 87.5MHz] <HE, HR, LH, EZ, K>
	Less than 8dBuV <HE, HR, LH>
	Less than 13dBuV <EZ, K>
	[at 98.0MHz / 108.0MHz] <HE, HR, LH, EZ, K>
S/N 50dB Quieting sensitivity :	
	Less than 36dBuV <D>
	[at 98.0MHz] <D>
	Less than 38dBuV <HE, HR, LH>
	Less than 40dBuV <EZ, K>
	[at 98.0MHz] <HE, HR, LH, EZ, K>
Signal to noise ratio :	More than 68dB (MONO)
(Input 54dBuV)	More than 66dB (STEREO)
	[at 83.0MHz] <D>
	[at 98.0MHz] <HE, HR, LH, EZ, K>
Distortion :	Less than 1.2% (MONO)
(Input 54dBuV)	Less than 2.0% (STEREO)
	[at 83.0MHz] <D>
	[at 98.0MHz] <HE, HR, LH, EZ, K>
Auto stop level :	25dBuV ± 10dB
	[at 83.0MHz] <D>
	[at 98.0MHz] <HE, HR, LH, EZ, K>
Stereo separation :	More than 30dB <D, HE, HR, LH>
	More than 15dB <EZ, K>
	[at 83.0MHz] <D>
	[at 98.0MHz] <HE, HR, LH, EZ, K>
Intermediate frequency :	10.7MHz

<AM (MW) SECTION>

Sensitivity :	54dBuV + 8dB/– 7dB
	[at 603kHz] <D, HE, HR, EZ, K>
	[at 600kHz] <LH>
	52dBuV + 6dB/– 7dB
	[at 999kHz / 1404kHz] <D, HE, HR, EZ, K>
	[at 1000kHz / 1400kHz] <LH>
Signal to noise ratio :	More than 36dB
(Input 74dBuV)	[at 999kHz (MONO)] <D, HE, HR, EZ, K>
	[at 1000kHz (MONO)] <LH>
Signal to noise ratio :	More than 34dB <D>
(Input 100dBuV)	[at 999kHz (STEREO)] <D>
Distortion :	Less than 4.0%
	[at 999kHz (MONO)] <D, HE, HR, EZ, K>
	[at 1000kHz (MONO)] <LH>
	Less than 4.0%
	[at 999kHz (STEREO)] <D>
Auto stop level :	50dBuV + 10dBuV/– 15dBuV
	[at 999kHz] <D, HE, HR, EZ, K>
	[at 1000kHz] <LH>
Stereo separation :	More than 15dB [at 999kHz] <D>
Intermediate frequency :	450kHz

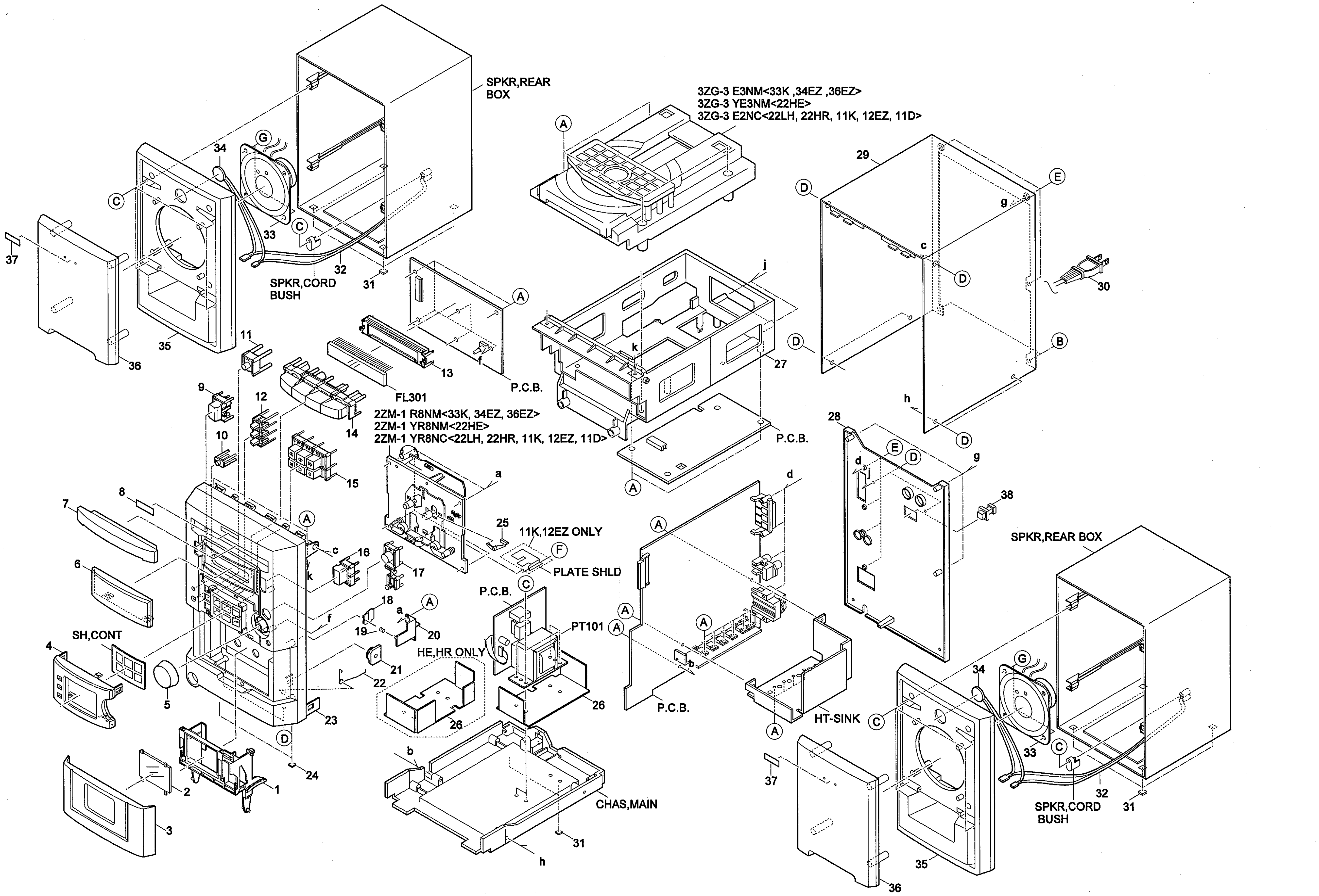
<LW SECTION> (EZ, K only)

Sensitivity :	Less than 70dBuV [at 144kHz]
	Less than 68dBuV [at 198kHz]
	Less than 66dBuV [at 290kHz]
Signal to noise ratio :	More than 32dB [at 198kHz]
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.14% (W.R.M.S)
Pinch roller pressure :	270 ~ 330g
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	2 ~ 7g-cm (FWD, REV)
Distortion :	Less than 3.0% (REC/PB, 0VU)
Noise level :	Less than 80mV
	(PB, REC/PB, FILTER DIN AUDIO)
Erasing ratio :	More than 55dB (at 125Hz, +10VU)
Test tape :	TTA–100
	TTA–602 (NORMAL)

MECHANICAL EXPLODED VIEW 1 / 1



SPKR,REAR BOX
3ZG-3 E3NM<33K ,34EZ ,36EZ>
3ZG-3 YE3NM<22HE>
3ZG-3 E2NC<22LH, 22HR, 11K, 12EZ, 11D>
A
G
C
34
33
32
31
37
35
36
SPKR,CORD BUSH
29
D
E
g
c
30
B
h
j
k
27
P.C.B.
A
f
13
FL301
11
12
9
10
14
15
2ZM-1 R8NM<33K, 34EZ, 36EZ>
2ZM-1 YR8NM<22HE>
2ZM-1 YR8NC<22LH, 22HR, 11K, 12EZ, 11D>
a
25
11K,12EZ ONLY
F
PLATE SHLD
28
d
38
SPKR,REAR BOX
7
8
6
16
17
SH,CONT
4
5
18
19
20
21
22
23
24
HE,HR ONLY
26
PT101
b
HT-SINK
1
2
3
CHAS,MAIN

MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

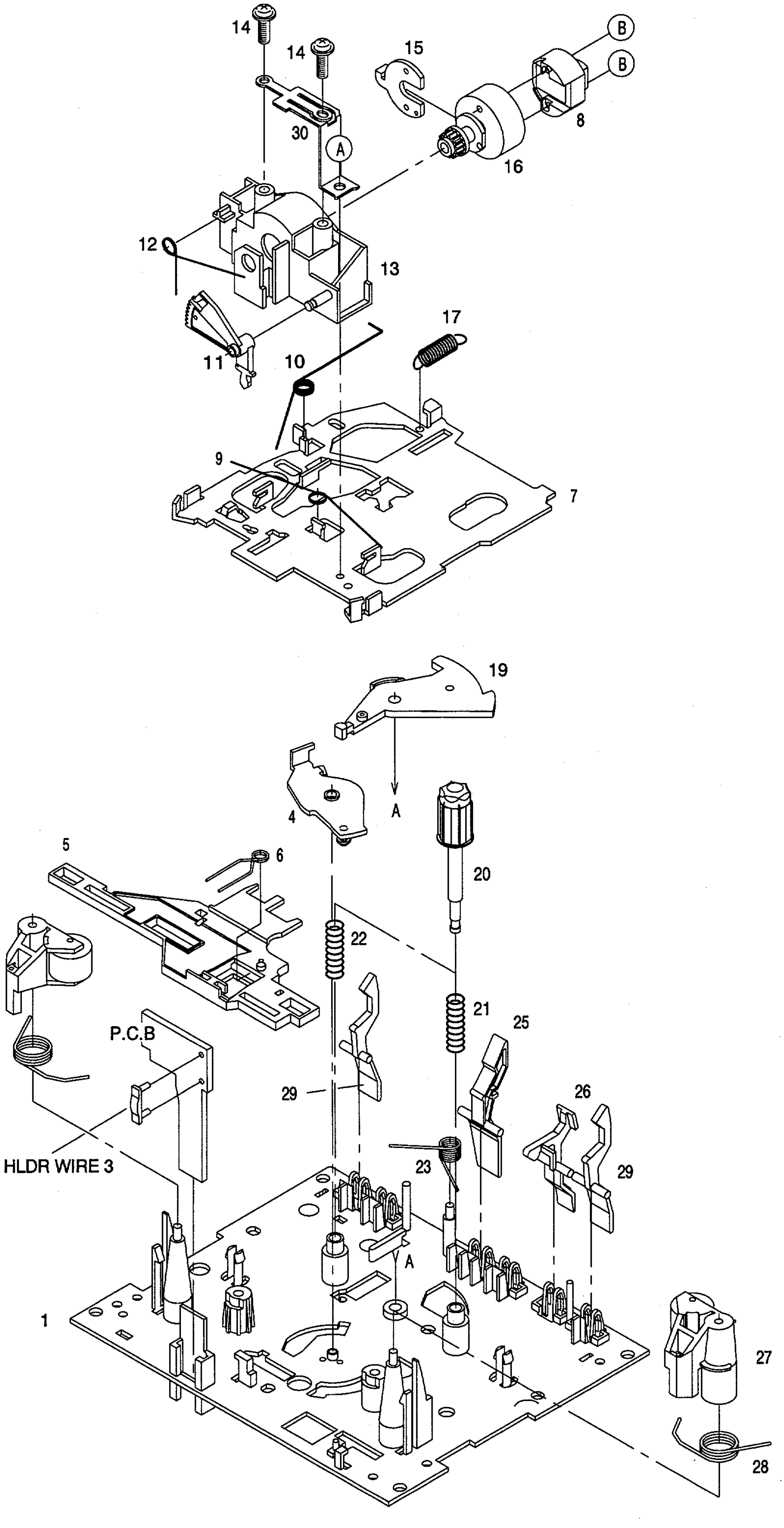
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CL7-201-110	0E	FRAME,BOX-CASS
2	8Z-CL7-052-010	0E	WINDOW,CASS
3	8Z-CLH-031-010	1B	PANEL,BOX-CASS D<11D>
3	8Z-CLH-032-010		PANEL,BOX-CASS<11K,12EZ>
3	8Z-CL7-031-110		PANEL,BOX-CASS<EXCEPT 11D,11K,12EZ>
4	8Z-CLH-041-010	1C	PANEL,FR D<11D>
4	8Z-CLH-042-010		PANEL,FR<11K,12EZ>
4	8Z-CL7-041-010		PANEL,FR<EXCEPT 11D,11K,12EZ>
5	8Z-CL7-081-110	1A	KNOB,RTRY VOL
6	8Z-CLH-051-010	1A	WINDOW,DISP D<11D>
6	8Z-CL7-051-010		WINDOW,DISP<11K,22HE,22HR,22LH,33K>
6	8Z-CL7-055-010		WINDOW,DISP EZ<12EZ,34EZ,36EZ>
7	8Z-CL7-036-110	1A	PANEL,TRAY
8	87-B00-002-010	0E	BADGE,AIWA 30 ABS SIL
9	8Z-CL7-060-110	1A	KEY,POWER ASSY
10	8Z-CL7-085-010	0E	LENS,RC
11	8Z-CL7-070-010	0E	KEY,ECO
12	8Z-CL7-067-010	1A	KEY,GEQ
13	82-NF7-210-110	0E	GUIDE,FL(*)
14	8Z-CLH-063-010	1B	KEY,FUNC ASSY<11D>
14	8Z-CL7-063-010		KEY,FUNC ASSY<EXCEPT 11D>
15	8Z-CL7-065-010	1D	KEY,CONT ASSY
16	8Z-CLH-062-010	0E	KEY,OPEN D<11D>
16	8Z-CL7-062-110		KEY,OPEN<EXCEPT 11D>
17	8Z-CL7-069-010	0E	KEY,Q-SOUND
18	82-NF5-229-010	0E	PLATE,LOCK(*)
19	82-NF5-228-010	0E	SPR-C,LOCK
20	85-CE6-217-010	0E	HLDR, LOCK
21	87-NF8-220-010	0E	DMPR,150
22	88-CL4-220-010	0E	SPR-T,CASS
23	8Z-CLH-002-010	1F	CABI,FR D<11D>
23	8Z-CLH-003-010		CABI,FR K<11K>
23	8Z-CLH-001-010		CABI,FR EZ<12EZ>
23	8Z-CL7-003-010		CABI,FR LH<22HE,22HR,22LH>
23	8Z-CL7-001-210		CABI,FR U<33K>
23	8Z-CL7-004-010		CABI,FR EZ-M34<34EZ>
23	8Z-CL7-005-010		CABI,FR EZ-M36<36EZ>
24	88-CL4-215-010	0E	CUSH,FOOT FR
25	82-ZM1-264-010	0E	LVR,EJECT R
26	8Z-CL7-213-010	--	HLDR,TRANS U<11D>
26	8Z-CL7-215-010		HLDR,TRANS HR<22HE,22HR>
26	8Z-CL7-214-010		HLDR,TRANS LH<EXCEPT 11D,22HE,22HR>
27	8Z-CL7-205-110	1B	HLDR,CD
28	8Z-CLH-017-110	1C	PANEL,REAR SC<11D>
28	8Z-CLH-015-110		PANEL,REAR KSC<11K>
28	8Z-CLH-016-110		PANEL,REAR EZSC<12EZ>
28	8Z-CL7-014-110		PANEL,REAR HEJ<22HE>
28	8Z-CL7-015-010		PANEL,REAR HRJ<22HR>
28	8Z-CL7-020-110		PANEL,REAR LHSC<22LH>
28	8Z-CL7-016-110		PANEL,REAR K<33K>
28	8Z-CL7-017-110		PANEL,REAR EZ-M34<34EZ>
28	8Z-CL4-018-110		PANEL,REAR EZ-M36<36EZ>
29	8Z-CL7-026-010	1H	CABI,TOP
⚠ 30	87-050-098-010	--	AC CORD ASSY,D BLK<11D>
⚠ 30	87-050-108-010		AC CORD ASSY,K 3PH<11K>
⚠ 30	87-A80-108-010		AC CORD ASSY,K BLK 3P<33K>
⚠ 30	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI<EXCEPT 11D,11K,33K>
31	88-CL4-216-010	0E	CUSH,FOOT REAR
32	87-CL4-764-010	1A	CORD SPKR<EXCEPT 33K,34EZ,36EZ>
33	8Z-CL7-764-010	--	SPKR,WOOFER 16 OHM<11D,11K,12EZ>
33	8Z-CL7-761-010		SPKR,WOOFER<22HE,22HR,22LH>
34	87-CL4-762-010	0E	SPKR CER TWEETER<EXCEPT 33K,34EZ,36EZ>
35	8Z-CL7-101-010	1F	SPKR,PANEL FR<EXCEPT 33K,34EZ,36EZ>
36	8Z-CL7-103-010	1B	SPKR,GRILL FRAME<11D,11K,12EZ,22HR,22LH>
36	8Z-CL7-109-010		SPKR,GRILL ASSY<22HE>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
37	8Z-CL7-107-010	0E	BADGE,AIWA SILVER<11D,11K,12EZ,22HR,22LH>
38	84-ZG1-245-210	0E	CAP,OPTICAL<11D>
A	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10
B	87-B10-250-010	0E	BVT2+3-12 W/O SLOT CR SILVER
C	87-067-758-010	0E	BVT2+3-12 W/O SLOT
D	87-B10-231-010	0E	QT1+3-12 SILVER CR
E	87-B10-230-010	0E	BVT2+3-10 W/O SLOT SILVER CR
F	87-571-032-410	0E	VIT+2-3
G	87-761-097-410	0E	VFT2+3-10 GLD<EXCEPT 33K,34EZ,36EZ>

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1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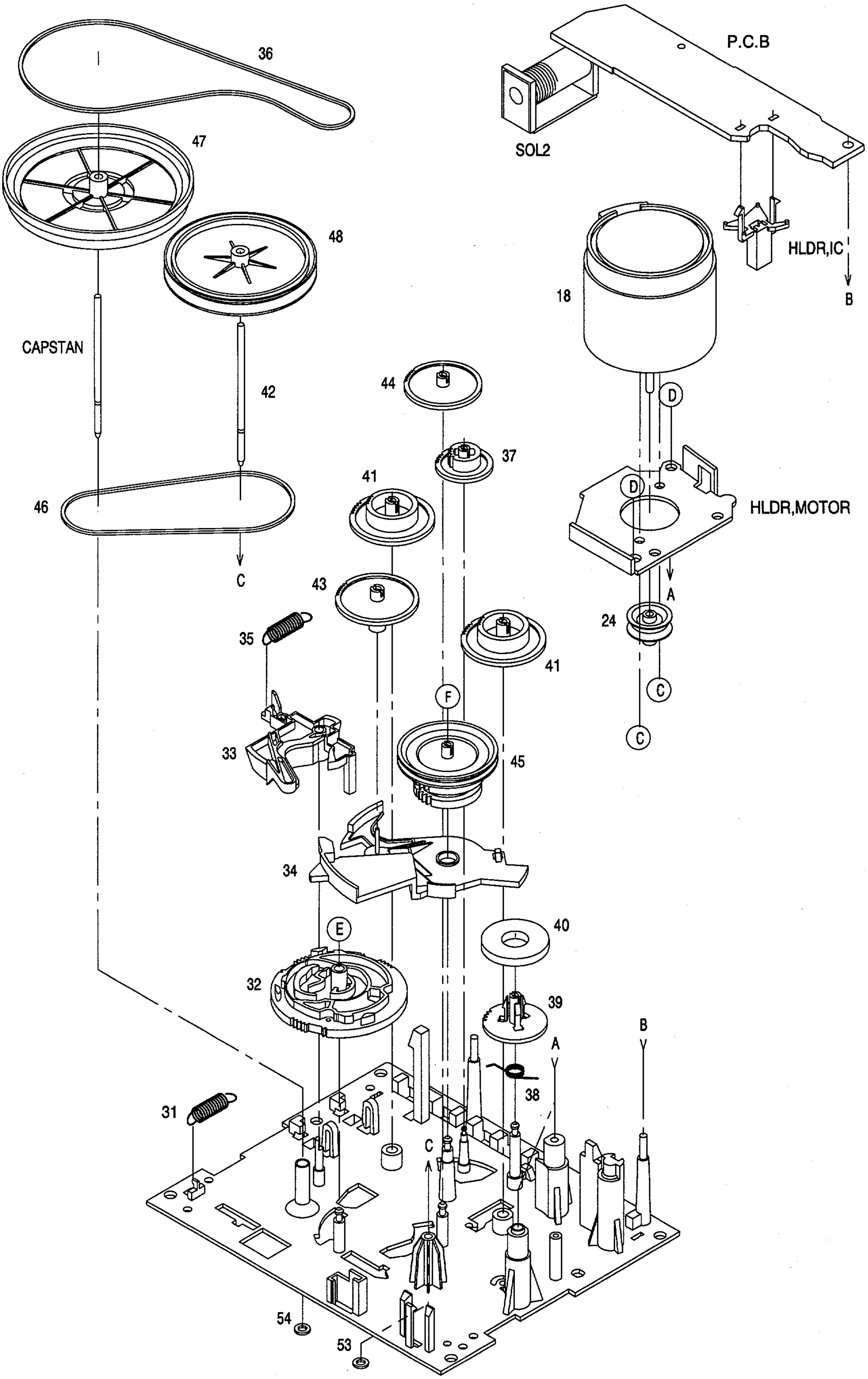
15
B
B
8
30
A
16
12
13
17
11
10
9
7
19
4
A
5
6
20
3
22
21
25
P.C.B
2
29
26
23
29
HLDR WIRE 3
A
1
27
28

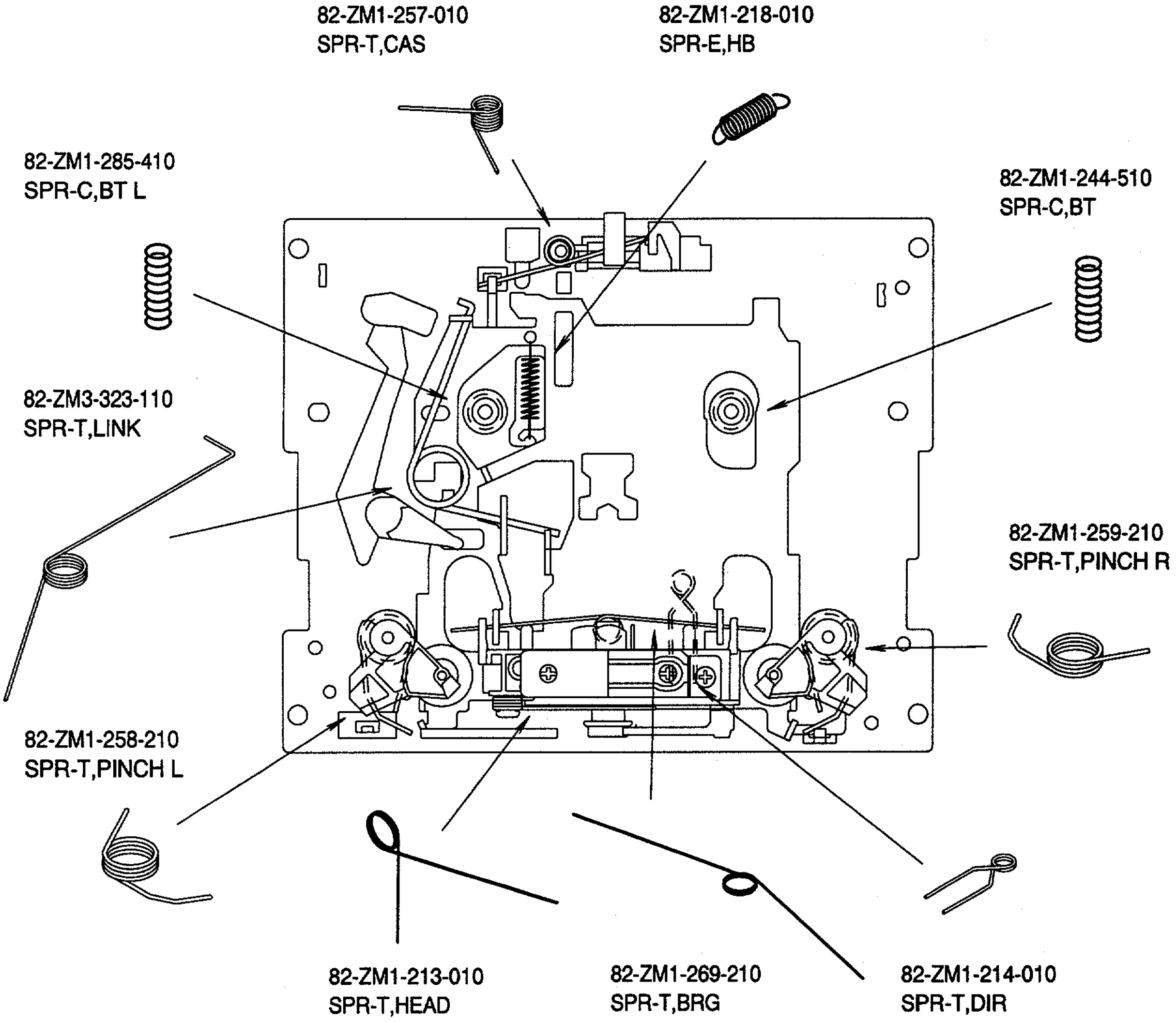

36
P.C.B
SOL2
47
48
HLDR,IC
B
18
CAPSTAN
42
44
D
37
41
D
HLDR,MOTOR
46
C
43
A
24
35
41
C
F
C
33
45
34
E
40
32
39
B
A
38
31
C
54
53

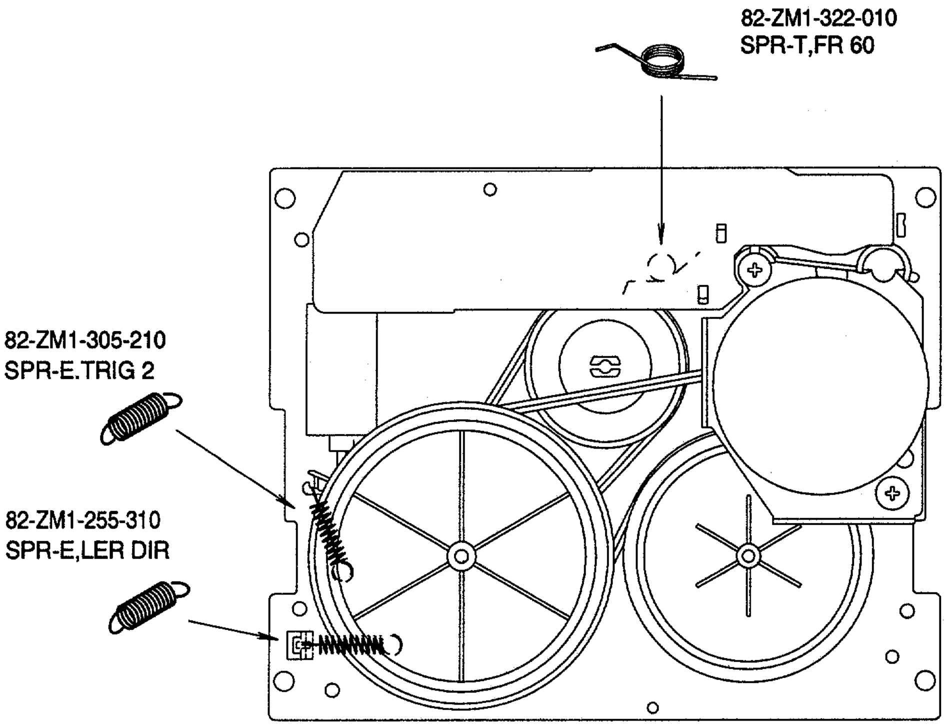
TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

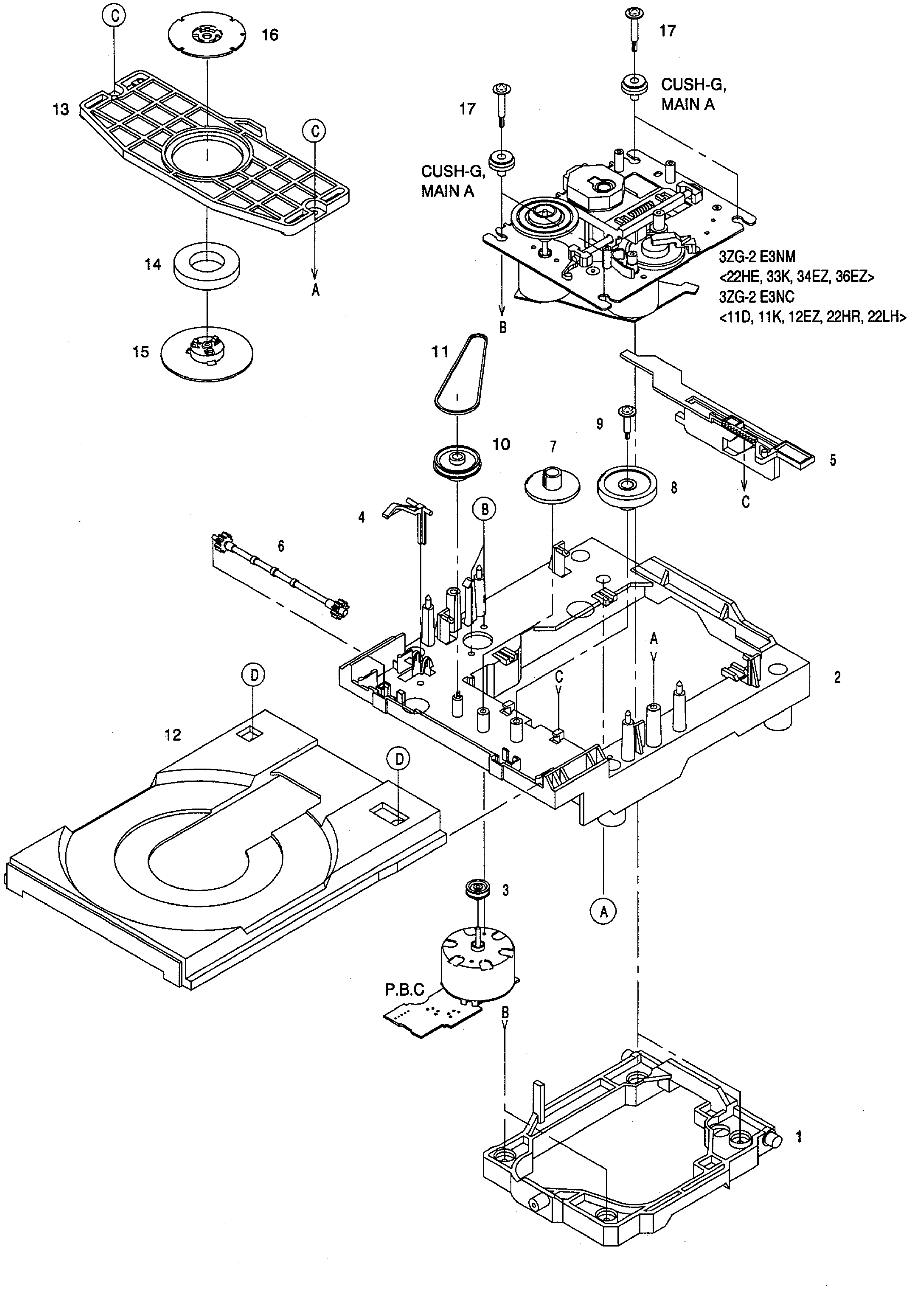
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM1-327-310	1D	CHAS ASSY,RM
2	82-ZM1-258-210	0E	SPR-T,PINCH L
3	82-ZM1-341-210	1A	LVR ASSY,PINCH L2
4	82-ZM1-295-310	0E	PLATE ASSY LINK
5	82-ZM1-266-310	0E	LVR,DIR
6	82-ZM1-214-010	0E	SPR-T,DIR
7	82-ZM1-206-910	1A	CHAS,HEAD
8	87-046-399-110	2A	HEAD,PPH YK56R-BS411
9	82-ZM1-269-210	0E	SPR-T,BRG
10	82-ZM3-323-110	0E	SPR-T,LINK 3
11	82-ZM1-210-110	0E	GEAR,H T
12	82-ZM1-213-010	0E	SPR-T,HEAD
13	82-ZM1-207-910	1A	GUIDE,TAPE
14	82-ZM1-283-310	0E	S-SCREW,AZIMUTH
15	82-ZM1-314-110	0E	PLATE,HEAD
16	82-ZM1-208-310	0E	HLDR,HEAD
17	82-ZM1-218-010	0E	SPR-E,HB
18	87-045-347-010	1H	MOT,SHU2L 70
19	82-ZM1-222-210	0E	LVR,PLAY
20	82-ZM1-217-410	0E	REEL TABLE
21	82-ZM1-244-510	0E	SPR-C,BT
22	82-ZM1-285-410	0E	SPR-C,BT L
23	82-ZM1-257-010	0E	SPR-T,CAS
24	82-ZM1-247-110	0E	PULLEY,MOTOR
25	82-ZM1-242-010	0E	LVR,CAS
26	82-ZM1-243-010	0E	LVR,STOP
27	82-ZM1-344-210	0E	LVR ASSY,PINCH R2
28	82-ZM1-259-210	0E	SPR-T,PINCH R
29	82-ZM1-240-110	0E	LVR,REC(*)
30	82-ZM1-298-010	0E	SPR-P EARTH
31	82-ZM1-255-310	0E	SPR-E,LVR DIR
32	82-ZM1-221-310	0E	GEAR,CAM(*)
33	82-ZM1-227-310	0E	LVR,TRIG
34	82-ZM1-224-410	0E	LVR,FR
35	82-ZM1-305-210	0E	SPR-E,TRIG 2
36	82-ZM1-340-010	0E	BELT,SBU MAIN2
37	82-ZM1-223-010	0E	GEAR,PLAY
38	82-ZM1-322-010	0E	SPR-T,FR 60
39	82-ZM1-220-210	0E	GEAR,IDLER
40	82-ZM3-616-010	0E	RING MAGNET 4
41	82-ZM1-216-410	0E	GEAR,REEL
42	82-ZM1-236-010	0E	CAPSTAN,2-41.5
43	82-ZM1-225-210	0E	GEAR,FR
44	82-ZM1-226-010	0E	GEAR,REW
45	82-ZM3-333-310	1A	SLIP DISK ASSY 2
46	82-ZM1-338-110	0E	BELT,FR 4
47	82-ZM1-349-110	1A	FLY-WHL,R W
48	82-ZM1-348-110	0E	FLY-WHL,L W
A	82-ZM1-315-010	0E	S-SCREW GUIDE TAPE
B	80-ZM6-207-010	0E	V+1.6-7
C	87-251-070-410	0E	U+2.6-3
D	87-741-073-410	0E	UT2+2.6-6 GLD
E	87-B10-008-010	0E	W-P,2.08-8-0.4-SLIP
F	82-ZM1-247-210	0E	PULLEY,MOTOR

SPRING APPLICATION POSITION


82-ZM1-257-010
SPR-T,CAS
82-ZM1-218-010
SPR-E,HB
82-ZM1-285-410
SPR-C,BT L
82-ZM1-244-510
SPR-C,BT
82-ZM3-323-110
SPR-T,LINK
82-ZM1-259-210
SPR-T,PINCH R
82-ZM1-258-210
SPR-T,PINCH L
82-ZM1-213-010
SPR-T,HEAD
82-ZM1-269-210
SPR-T,BRG
82-ZM1-214-010
SPR-T,DIR


82-ZM1-322-010
SPR-T,FR 60
82-ZM1-305-210
SPR-E.TRIG 2
82-ZM1-255-310
SPR-E,LER DIR

CD MECHANISM EXPLODED VIEW 1 / 2



Ⓒ
16
13
Ⓒ
14
A
15
17
CUSH-G,
MAIN A
17
CUSH-G,
MAIN A
3ZG-2 E3NM
<22HE, 33K, 34EZ, 36EZ>
3ZG-2 E3NC
<11D, 11K, 12EZ, 22HR, 22LH>
B
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C
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C
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P.B.C
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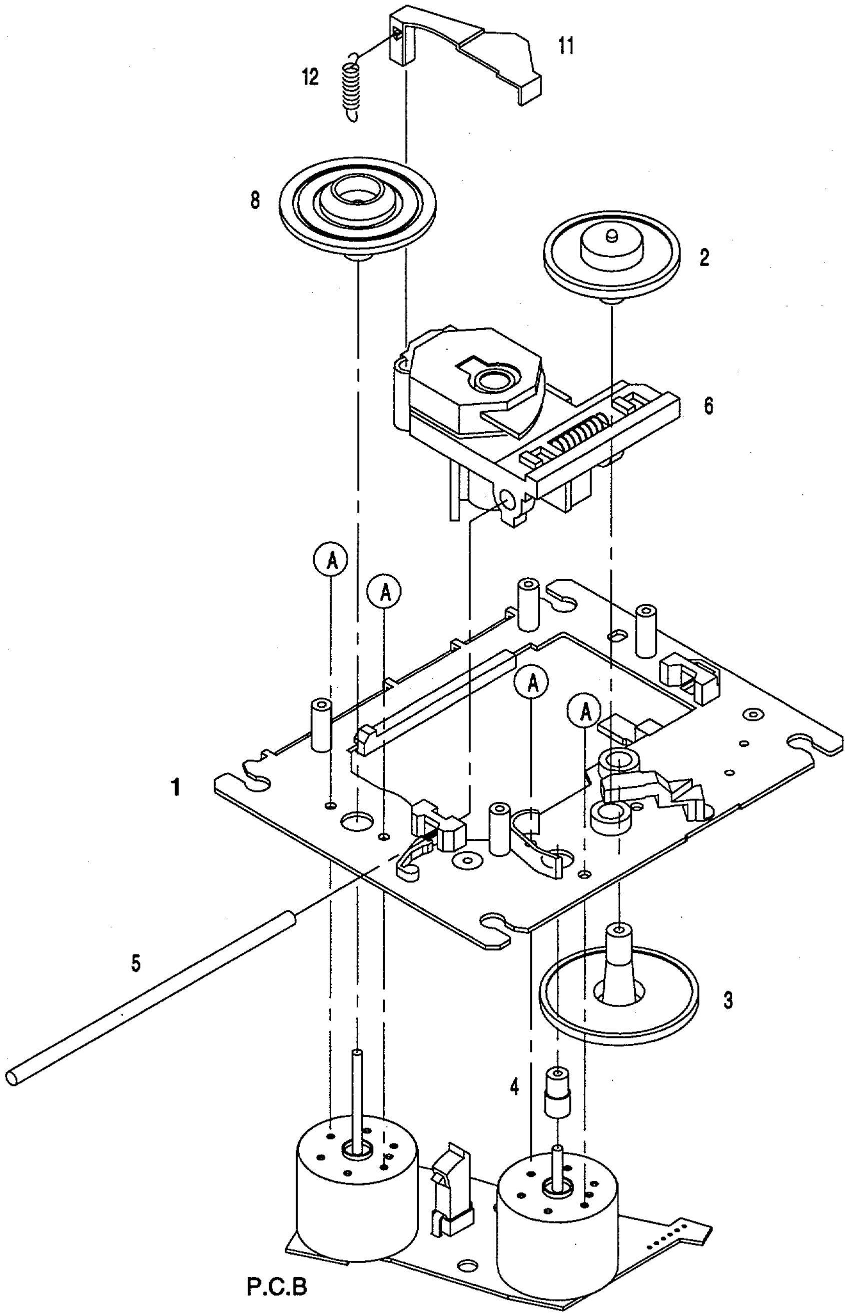
CD MECHANISM PARTS LIST 1 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG3-224-310	1B	HLDR,M2
2	83-ZG3-228-610	1C	CHAS,L6
3	83-ZG3-208-010	0E	PULLEY,MOTOR
4	83-ZG3-213-010	0E	LVR,SW
5	83-ZG3-209-610	1A	CAM,SLIDE
6	83-ZG3-207-010	0E	GEAR,TRAY
7	83-ZG3-204-210	0E	GEAR,C
8	83-ZG3-205-010	0E	GEAR,D
9	83-ZG3-217-010	0E	S-SCREW,GEAR D
10	83-ZG3-220-210	0E	GEAR,PULLEY 2
11	83-ZG3-214-010	0E	BELT,L
12	83-ZG3-229-410	1C	TRAY,CD 2
13	83-ZG3-210-110	1B	HLDR,CHUCK
14	83-ZG3-602-010	1A	RING,MAG
15	83-ZG3-212-010	0E	CAP,DISC
16	83-ZG3-211-010	0E	PLATE,DISC
17	81-ZG1-254-010	0E	S-SCEW,MECH HLDR
A	87-067-945-110	0E	VFT2+3-12(F10)
B	87-251-071-110	0E	U+2.6-4
C	87-512-074-210	0E	VFT2+2.6-8
D	87-352-075-210	0E	VT2+2.6-10

CD MECHANISM EXPLODED VIEW 2 / 2



CD MECHANISM PARTS LIST 2 / 2

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	83-ZG2-243-210	--	CHAS ASSY,SHT
2	83-ZG2-235-010	--	GEAR,A3
3	83-ZG2-205-210	0E	GEAR,B
4	83-ZG2-236-010	--	GEAR MOTOR 3
5	83-ZG2-253-010	--	SHAFT,SLIDE 5
6	87-A90-836-010	--	PICKUP,KSS-213F
8	83-ZG2-227-210	--	TURN TABLE,C1
11	83-ZG2-245-410	--	LEVER,SHUTTER
12	83-ZG2-250-110	--	SPR-E,SHT 2
A	87-261-032-210	0E	SCREW V+2-3

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CLH-908-010	--	IB,D(J)-C<11D>
1	8Z-CLH-903-010		IB,K(E)-M11-C<11K>
1	8Z-CLH-904-110		IB,E(9L)-M12-C<12EZ>
1	8Z-CL7-915-010		IB,H(E)BARON-M<22HE>
1	8Z-CL7-909-010		IB,H(ECA)-M22-C<22HR>
1	8Z-CL7-912-010		IB,LH(ESP)-C<22LH>
1	8Z-CL7-904-010		IB,K(E)-M33-M<33K>
1	8Z-CL7-903-110		IB,E(9L)-M34-M<34EZ,36EZ>
2	87-A90-030-010	1B	ANT,LOOP AM-NC C<11D,11K,12EZ,22HR,22LH>
2	87-006-225-010		AM LOOP ANT NC2<22HE,33K,34EZ,36EZ>
3	87-043-115-010	1A	ANT,FEEDER FM<11D,22HE,22HR,22LH>
3	87-A90-118-010		ANT,WIRE FM(Z)<11K,12EZ,33K,34EZ,36EZ>
⚠ 4	87-A91-017-010		PLUG,CONVERSION JT-0476<22HE,22HR,22LH>
5	8Z-CK4-961-010	1H	RC UNIT,RC-ZAT03(VS)<11D>
5	8Z-CK4-962-010		RC UNIT,RC-ZAT04(VS)<11K,12EZ,22HR,22LH>
5	8Z-CK4-952-010		RC UNIT,RC-ZAT04<22HE,33K,34EZ,36EZ>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGE SUPPRESSOR
セラコン	CAP, CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM, SHAFT
ジグガイド	GUIDE, SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW, SERPART

サービス技術ニュース	
番号	連絡内容
G—　—	
G—　—	
G—　—	

アイワ株式会社
AIWA CO.,LTD.

9420025, 9630472, 931261

Tokyo Japan

〒110-8710 東京都台東区池之端1-2-11 ☎03（3827）3111（代表）

Printed in Singapore

XR-M11
XR-M12

COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM: 2ZM–1 YR8NC
- BASIC CD MECHANISM: 3ZG–3 E3NC
- TYPE: K<M11>
  EZ<M12>

SIMPLE MANUAL

- Replace this Service Manual with ”Revision Publishing” when it is issued.

SERVICE MANUAL

S/M Code No. 09–991–400–3T4

ELECTRICAL MAIN PARTS LIST - 1/7

NOTE: The characters in the suffix column indicate the part usage.

K .......................XX..................................A...................
EZ ......................XX...................................B..................

REF.NO		PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
C	302	87-010-197-080		CAP, CHIP 0.01 DM	AB
C	304	87-010-405-040		CAP,E 10-50	AB
C	307	87-010-421-040		CAP,E 4.7-50 5L	AB
C	308	87-010-421-040		CAP,E 4.7-50 5L	AB
C	309	87-015-883-080		CHIP CAPACITOR, 0.022 (D)	AB
C	305	87-A10-797-040		CAP,E 47-35 M 5L SRM	AB
C	316	87-010-197-080		CAP, CHIP 0.01 DM	AB
C	317	87-010-198-080		CAP, CHIP 0.022	AB
C	315	87-010-198-080		CAP, CHIP 0.022	AB
C	313	87-010-263-040		CAP,E 100-10	AB
C	319	87-010-320-080		CHIP CAP 68P	AB
C	318	87-010-320-080		CHIP CAP 68P	AB
C	314	87-A10-189-040		CAP,E 220-10	AB
C	329	87-010-198-080		CAP, CHIP 0.022	AB
C	322	87-010-320-080		CHIP CAP 68P	AB
C	327	87-010-320-080		CHIP CAP 68P	AB
C	328	87-010-320-080		CHIP CAP 68P	AB
C	323	87-010-320-080		CHIP CAP 68P	AB
C	320	87-010-320-080		CHIP CAP 68P	AB
C	325	87-010-320-080		CHIP CAP 68P	AB
C	321	87-010-320-080		CHIP CAP 68P	AB
C	324	87-010-320-080		CHIP CAP 68P	AB
C	326	87-010-320-080		CHIP CAP 68P	AB
C	339	87-010-197-080		CAP, CHIP 0.01 DM	AB
C	338	87-010-197-080		CAP, CHIP 0.01 DM	AB
C	331	87-010-312-080		C-CAP,S 15P-50 CH	AB
C	335	87-010-316-080		C-CAP,S 33P-50 CH	AB
C	330	87-010-318-080		C-CAP,S 47P-50 CH	AB
C	333	87-010-401-040		CAP,E 1-50 SME	AB
C	340	87-010-197-080		CAP, CHIP 0.01 DM	AB
CN	303	87-099-203-010		CONN,10P 6216 H	AB
CN	301	87-099-720-010		CONN,30P TYK-B(P)	AB
CN	302	87-CL4-704-010		CONN ASSY 9P DECK	AB
D	308	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	301	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	309	87-020-465-080		DIODE,1SS133 (110MA)	.B
D	316	87-017-931-080		ZENER,MTZJ5.6B	AB
D	318	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	317	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	311	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	314	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	319	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	312	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	315	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	313	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	322	87-020-027-080		CHIP-DIODE 1SS184	AB
D	320	87-020-125-080		DIODE,1SS181 (100MA)	AB
D	323	87-020-465-080		DIODE,1SS133 (110MA)	AB
D	324	87-020-465-080		DIODE,1SS133 (110MA)	.B
D	325	87-020-465-080		DIODE,1SS133 (110MA)	AB
FL	301	8Z-CL7-682-110		FL,SVA-11MM23	AB
GFL	1	82-NF7-210-110		GUIDE,FL (*)	AB
IC	303	87-A20-914-010		IC,SPS-442-1-F	AB
IC	301	8Z-CL7-683-010		C-IC,M38B557MC	AB
LED	301	87-A40-229-040		LED,SLR-342VR TB7 RED	AB
LED	305	87-A40-619-040		LED,SLR-56PT-T31-W GRN	AB
LED	302	87-A40-619-040		LED,SLR-56PT-T31-W GRN	AB
LED	304	87-A40-619-040		LED,SLR-56PT-T31-W GRN	AB
LED	303	87-A40-619-040		LED,SLR-56PT-T31-W GRN	AB
Q	301	87-026-245-080		TR,DTC114ES	AB
Q	309	89-111-624-080		TR,2SA1162Y	AB
Q	302	89-112-965-080		TR,2SA1296 (0.75W)	AB
Q	303	89-112-965-080		TR,2SA1296 (0.75W)	AB
Q	304	89-327-125-080		CHIP TR,2SC2712GR	AB
Q	305	89-327-125-080		CHIP TR,2SC2712GR	AB
Q	307	89-327-125-080		CHIP TR,2SC2712GR	AB
Q	306	89-327-125-080		CHIP TR,2SC2712GR	AB
Q	313	87-026-235-080		CHIP-TR,DTC114EK	AB
Q	310	87-A30-090-080		FET,2SK2541	AB
Q	311	89-327-125-080		CHIP TR,2SC2712GR	AB
Q	312	89-327-125-080		CHIP TR,2SC2712GR	AB
S	306	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	301	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	307	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	303	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	308	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	305	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	304	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	302	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	309	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	312	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	316	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	317	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	310	87-A90-095-080		SW,TACT EVQ11G04M	AB
S	318	87-A90-095-080		SW,TACT EVQ11G04M	AB

ELECTRICAL MAIN PARTS LIST - 2/7

S	314	87-A90-095-080	SW,TACT EVQ11G04M	AB...................
S	311	87-A90-095-080	SW,TACT EVQ11G04M	AB...................
S	313	87-A90-095-080	SW,TACT EVQ11G04M	AB...................
S	315	87-A90-095-080	SW,TACT EVQ11G04M	AB...................
S	351	87-A90-085-010	SW,RTRY EC16B 24204	AB...................
X	301	87-030-375-080	VIB,CF 4.19MG200	AB...................
C	7	87-010-178-080	CHIP CAP 1000P	AB...................
C	5	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	2	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	8	87-010-198-080	CAP, CHIP 0.022	AB...................
C	9	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	4	87-010-371-080	CAP, ELECT 470-6.3V	AB...................
C	6	87-010-374-080	CAP, ELECT 47-10V	AB...................
C	3	87-010-401-080	CAP, ELECT 1-50V	AB...................
C	1	87-010-406-080	CAP, ELECT 22-50	AB...................
C	17	87-010-178-080	CHIP CAP 1000P	AB...................
C	13	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	18	87-010-213-080	C-CAP,S 0.015-50 B	AB...................
C	10	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	12	87-010-401-080	CAP, ELECT 1-50V	AB...................
C	14	87-010-405-080	CAP, ELECT 10-50V	AB...................
C	16	87-010-544-080	CAP, ELECT 0.1-50V	AB...................
C	29	87-010-178-080	CHIP CAP 1000P	AB...................
C	22	87-010-180-080	C-CER 1500P	AB...................
C	23	87-010-993-080	C-CAP,S 0.056-25 B	AB...................
C	24	87-012-155-080	C-CAP 180P-50CH	AB...................
C	20	87-016-369-080	C-CAP,S 0.033-25 B K	AB...................
C	21	87-A11-010-080	CAP,M 0.082-50 J DE	AB...................
C	26	87-A11-014-080	CAP,M 0.22-50 J DE	AB...................
C	30	87-010-178-080	CHIP CAP 1000P	AB...................
C	39	87-010-178-080	CHIP CAP 1000P	AB...................
C	34	87-010-186-080	CAP,CHIP 4700P	AB...................
C	38	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	35	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	36	87-010-374-080	CAP, ELECT 47-10V	AB...................
C	33	87-010-401-080	CAP, ELECT 1-50V	AB...................
C	31	87-010-402-080	CAP, ELECT 2.2-50V	AB...................
C	32	87-010-403-080	CAP, ELECT 3.3-50V	AB...................
C	37	87-010-404-080	CAP, ELECT 4.7-50V	AB...................
C	40	87-010-147-080	C-CAP,S 3P-50 CH	AB...................
C	44	87-010-176-080	C-CAP,S 680P-50 SL	AB...................
C	45	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	46	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	47	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	42	87-010-313-080	CAP, CHIP 18P	AB...................
C	48	87-010-315-080	C-CAP,S 27P-50 CH	AB...................
C	41	87-A11-006-080	CAP,M 0.033-50 J DE	AB...................
C	59	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	58	87-010-316-080	C-CAP,S 33P-50 CH	AB...................
C	57	87-010-316-080	C-CAP,S 33P-50 CH	AB...................
C	50	87-012-140-080	CAP 470P	AB...................
C	66	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	60	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	61	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	67	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	68	87-010-322-080	C-CAP,S 100P-50 CH	....
C	62	87-010-370-080	CAP,E 330-6.3 SME	AB...................
C	65	87-010-404-080	CAP, ELECT 4.7-50V	AB...................
C	79	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	75	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	78	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	77	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	76	87-A10-102-080	CAP,E 1000-10 REA	AB...................
C	80	87-010-112-080	CAP, ELECT 100-16V	AB...................
C	85	87-010-263-080	CAP, ELECT 100-10V	AB...................
C	82	87-010-405-080	CAP, ELECT 10-50V	AB...................
C	81	87-010-405-080	CAP, ELECT 10-50V	AB...................
C	84	87-012-157-080	C-CAP,S 330P-50 CH	AB...................
C	83	87-012-157-080	C-CAP,S 330P-50 CH	AB...................
C	93	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	95	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	97	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	90	87-010-197-080	CAP, CHIP 0.01 DM	AB...................
C	96	87-010-221-080	CAP, ELECT 470-10V	AB...................
C	92	87-010-235-080	CAP,E 470-16 SME	AB...................
C	99	87-010-374-080	CAP, ELECT 47-10V	AB...................
C	91	87-010-404-080	CAP, ELECT 4.7-50V	AB...................
C	98	87-012-154-080	C-CAP,S 150P-50 CH	AB...................
C	100	87-010-318-080	C-CAP,S 47P-50 CH	AB...................
C	106	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	103	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	105	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	104	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	128	87-010-196-080	CHIP CAPACITOR,0.1-25	AB...................
C	125	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	127	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	123	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	121	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	122	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	124	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	126	87-010-322-080	C-CAP,S 100P-50 CH	AB...................
C	129	87-010-805-080	CAP, S 1-16	AB...................

ELECTRICAL MAIN PARTS LIST - 3/7

C	133	87-010-315-080	C-CAP,S 27P-50 CH	AB..................
C	132	87-010-805-080	CAP, S 1-16	AB..................
C	131	87-010-805-080	CAP, S 1-16	AB..................
C	155	87-010-197-080	CAP, CHIP 0.01 DM	....
C	156	87-010-263-080	CAP, ELECT 100-10V	....
C	151	87-010-805-080	CAP, S 1-16	AB..................
CN	2	87-099-203-010	CONN,10P 6216 H	AB..................
CN	1	87-A60-130-010	CONN,5P V FE	AB..................
CN	6	87-A60-130-010	CONN,5P V FE	AB..................
CN	3	87-A60-131-010	CONN,6P V FE	AB..................
CN	4	87-A60-248-010	CONN,16P H CFF1416	AB..................
D	4	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	2	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	1	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	22	87-020-027-080	CHIP-DIODE 1SS184	AB..................
D	21	87-020-027-080	CHIP-DIODE 1SS184	AB..................
D	23	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
FB	102	87-A90-896-080	F-BEAD, 035600STY7	AB..................
IC	6	87-020-903-010	IC,NJM7805FA	AB..................
IC	4	87-A20-157-010	IC,TA2092N	AB..................
IC	1	87-A20-446-010	C-IC,LA9241ML	AB..................
IC	2	87-A20-459-010	C-IC,LC78622ED	AB..................
IC	10	87-001-982-010	IC,TA7291S	AB..................
J	155	84-ZG1-244-310	CABI,OPTICAL	....
LED	150	87-A40-558-010	LED,SLZ-8128A-01-A	....
Q	1	87-026-463-080	TR,2SA933S (0.3W)	AB..................
Q	84	87-026-223-080	TR,DTC143TK	AB..................
Q	83	87-026-223-080	TR,DTC143TK	AB..................
Q	82	87-026-297-080	TR,DTA144TK	AB..................
Q	81	87-026-297-080	TR,DTA144TK	AB..................
Q	99	87-026-610-080	TR,KTC3198GR	AB..................
Q	92	89-109-521-080	TR,2SA952 (0.6W)	AB..................
Q	90	89-109-521-080	TR,2SA952 (0.6W)	AB..................
Q	96	89-109-521-080	TR,2SA952 (0.6W)	AB..................
Q	94	89-109-521-080	TR,2SA952 (0.6W)	AB..................
Q	98	89-318-155-080	TR,2SC1815 (0.4W)	AB..................
Q	150	87-A30-039-040	C-TR,2SD1383K	....
R	70	87-029-124-090	RESISTOR, FUSE 1/4W 2.2	AB..................
R	73	87-029-361-090	FUSING RESISTOR, 1/2W-3.3	AB..................
X	1	87-A70-046-010	VIB,XTAL 16.934MHZ	AB..................
		87-067-579-010	TAPPING SCREW, BVT2+3-8	AB..................
C	209	87-010-186-080	CAP,CHIP 4700P	AB..................
C	200	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	201	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	208	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	207	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	210	87-010-186-080	CAP,CHIP 4700P	AB..................
C	214	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	213	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	211	87-010-403-080	CAP, ELECT 3.3-50V	AB..................
C	212	87-010-403-080	CAP, ELECT 3.3-50V	AB..................
C	219	87-010-544-080	CAP, ELECT 0.1-50V	AB..................
C	222	87-010-189-080	C-CAP,S 8200P-50 B	AB..................
C	221	87-010-189-080	C-CAP,S 8200P-50 B	AB..................
C	227	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	220	87-010-544-080	CAP, ELECT 0.1-50V	AB..................
C	229	87-012-156-080	C-CAP,S 220P-50 CH	AB..................
C	230	87-012-156-080	C-CAP,S 220P-50 CH	AB..................
C	261	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	276	87-010-178-080	CHIP CAP 1000P	AB..................
C	273	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	275	87-012-145-080	CAP, CHIP S 270P CH	AB..................
C	274	87-012-145-080	CAP, CHIP S 270P CH	AB..................
D	201	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	206	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	209	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	203	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	205	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	202	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	204	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	210	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	211	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
J	231	87-A60-420-010	JACK,3.5 ST (MSC)	AB..................
J	241	87-A60-217-010	TERMINAL,SPKR 4P	AB..................
L	201	87-005-366-010	COIL, 1UH	AB..................
L	202	87-005-366-010	COIL, 1UH	AB..................
Q	202	87-A30-197-080	TR,KTA1267GR	AB..................
Q	201	87-A30-197-080	TR,KTA1267GR	AB..................
Q	203	87-A30-197-080	TR,KTA1267GR	AB..................
Q	204	87-A30-197-080	TR,KTA1267GR	AB..................
Q	207	87-A30-198-080	TR,KTC3199GR	AB..................
Q	206	87-A30-198-080	TR,KTC3199GR	AB..................
Q	205	87-A30-198-080	TR,KTC3199GR	AB..................
Q	208	87-A30-198-080	TR,KTC3199GR	AB..................
Q	209	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
Q	217	87-026-219-080	TR,DTA144ES (0.3W)	AB..................
Q	213	87-A30-126-010	TR,2SB1616	AB..................
Q	214	87-A30-126-010	TR,2SB1616	AB..................
Q	211	87-A30-127-010	TR,2SD2478	AB..................
Q	212	87-A30-127-010	TR,2SD2478	AB..................
Q	216	87-A30-198-080	TR,KTC3199GR	AB..................
Q	215	87-A30-198-080	TR,KTC3199GR	AB..................

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Q	210	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
Q	263	87-026-609-080	TR,KTA1266GR	AB..................
Q	262	89-406-555-080	TR,2SD655 (0.5W)	AB..................
Q	261	89-406-555-080	TR,2SD655 (0.5W)	AB..................
R	223	87-A00-258-080	RES,M/F 0.22-1W J	AB..................
R	224	87-A00-258-080	RES,M/F 0.22-1W J	AB..................
R	249	87-A00-258-080	RES,M/F 0.22-1W J	AB..................
R	250	87-A00-258-080	RES,M/F 0.22-1W J	AB..................
C	102	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	109	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	108	87-010-381-080	CAP, ELECT 330-16V	AB..................
C	107	87-010-384-080	CAP, ELECT 100-25V	AB..................
C	106	87-010-408-080	CAP, ELECT 47-50V	AB..................
C	105	87-012-140-080	CAP 470P	AB..................
C	101	87-016-495-090	CAP,E 3300-25 SMG	AB..................
C	104	87-A10-011-090	CAP,E 2200-25 SMG	AB..................
C	111	87-010-247-080	CAP, ELECT 100-50V	AB..................
C	110	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	112	87-010-263-080	CAP, ELECT 100-10V	AB..................
C	114	87-010-374-080	CAP, ELECT 47-10V	AB..................
C	113	87-010-403-080	CAP, ELECT 3.3-50V	AB..................
C	115	87-A11-007-080	CAP,M 0.047-50 J DE	AB..................
C	116	87-A11-007-080	CAP,M 0.047-50 J DE	AB..................
C	122	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	123	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	131	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	132	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	151	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z	AB..................
D	108	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	107	87-A40-341-080	ZENER,MTZJ 36 A	AB..................
D	103	87-A40-535-080	DIODE,1N5393-GOODARK	AB..................
D	102	87-A40-535-080	DIODE,1N5393-GOODARK	AB..................
D	101	87-A40-535-080	DIODE,1N5393-GOODARK	AB..................
D	104	87-A40-535-080	DIODE,1N5393-GOODARK	AB..................
D	105	87-A40-553-080	DIODE,1N4003 LES	AB..................
D	106	87-A40-553-080	DIODE,1N4003 LES	AB..................
D	110	87-A40-345-080	ZENER,MTZJ10C	AB..................
D	117	87-A40-553-080	DIODE,1N4003 LES	AB..................
D	116	87-A40-553-080	DIODE,1N4003 LES	AB..................
D	171	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
PR	201	87-A90-473-080	PROTECTOR,3.5A 491SERIES 60V	AB..................
PR	202	87-A90-473-080	PROTECTOR,3.5A 491SERIES 60V	AB..................
Q	104	87-A30-196-080	TR,2SC4115SRS	AB..................
Q	109	87-A30-198-080	TR,KTC3199GR	AB..................
Q	107	87-A30-198-080	TR,KTC3199GR	AB..................
Q	106	87-A30-198-080	TR,KTC3199GR	AB..................
Q	105	89-113-187-080	TR,2SA1318TU	AB..................
Q	101	89-213-702-010	TR,2SB1370 (1.8W)	AB..................
Q	102	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
Q	115	87-026-219-080	TR,DTA144ES (0.3W)	AB..................
Q	110	87-A30-197-080	TR,KTA1267GR	AB..................
Q	112	87-A30-198-080	TR,KTC3199GR	AB..................
Q	111	89-213-702-010	TR,2SB1370 (1.8W)	AB..................
W	101	8Z-CL7-652-110	CONN ASSY,8P ZCL7	AB..................
C	303	87-010-177-080	C-CAP,S 820P-50 SL	AB..................
C	304	87-010-177-080	C-CAP,S 820P-50 SL	AB..................
C	307	87-010-263-080	CAP, ELECT 100-10V	AB..................
C	308	87-010-263-080	CAP, ELECT 100-10V	AB..................
C	313	87-010-184-080	CHIP CAPACITOR 3300P(K)	AB..................
C	314	87-010-184-080	CHIP CAPACITOR 3300P(K)	AB..................
C	311	87-010-195-080	C-CAP,S 0.068-25 F	AB..................
C	312	87-010-195-080	C-CAP,S 0.068-25 F	AB..................
C	315	87-010-374-080	CAP, ELECT 47-10V	AB..................
C	317	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	318	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	321	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	349	87-010-322-080	C-CAP,S 100P-50 CH	AB..................
C	340	87-012-156-080	C-CAP,S 220P-50 CH	AB..................
C	350	87-010-322-080	C-CAP,S 100P-50 CH	AB..................
C	361	87-010-374-080	CAP, ELECT 47-10V	AB..................
C	362	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	386	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	393	87-010-178-080	CHIP CAP 1000P	AB..................
C	394	87-010-178-080	CHIP CAP 1000P	AB..................
C	405	87-010-188-080	CAP,CHIP 6800P	AB..................
C	406	87-010-188-080	CAP,CHIP 6800P	AB..................
C	403	87-010-321-080	CHIP CAPACITOR,82P(J)	AB..................
C	404	87-010-321-080	CHIP CAPACITOR,82P(J)	AB..................
C	401	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	402	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	408	87-010-426-080	C-CAP,S 0.012-25 B	AB..................
C	407	87-010-426-080	C-CAP,S 0.012-25 B	AB..................
C	459	87-010-175-080	CAP 560P	AB..................
C	458	87-010-178-080	CHIP CAP 1000P	AB..................
C	453	87-010-183-080	C-CAP,S 2700P-50 B	AB..................
C	454	87-010-183-080	C-CAP,S 2700P-50 B	AB..................
C	455	87-010-183-080	C-CAP,S 2700P-50 B	AB..................
C	456	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	451	87-010-198-080	CAP, CHIP 0.022	AB..................
C	452	87-010-382-080	CAP, ELECT 22-25V	AB..................
C	457	87-A10-772-080	CAP,M 5600P-50 J	AB..................
C	462	87-012-158-080	C-CAP,S 390P-50 CH	AB..................

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C	461	87-012-158-080	C-CAP,S 390P-50 CH	AB..................
CN	351	87-A60-624-010	CONN,7P V 2MM JMT	AB..................
D	311	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
IC	301	87-017-889-010	IC,NJM4558LD	AB..................
IC	401	87-017-889-010	IC,NJM4558LD	AB..................
L	451	87-007-342-010	COIL,OSC 85K BIAS	AB..................
Q	306	87-026-219-080	TR,DTA144ES (0.3W)	AB..................
Q	305	87-A30-090-080	FET,2SK2541	AB..................
Q	307	87-A30-090-080	FET,2SK2541	AB..................
Q	308	87-A30-090-080	FET,2SK2541	AB..................
Q	309	87-A30-197-080	TR,KTA1267GR	AB..................
Q	310	87-A30-197-080	TR,KTA1267GR	AB..................
Q	441	87-A30-197-080	TR,KTA1267GR	AB..................
Q	442	87-A30-197-080	TR,KTA1267GR	AB..................
Q	452	87-A30-198-080	TR,KTC3199GR	AB..................
Q	453	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
Q	451	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
Q	454	89-333-317-080	TR,2SC3331 (0.5W)	AB..................
C	601	87-010-180-080	C-CER 1500P	AB..................
C	602	87-010-180-080	C-CER 1500P	AB..................
C	609	87-010-213-080	C-CAP,S 0.015-50 B	AB..................
C	603	87-010-322-080	C-CAP,S 100P-50 CH	AB..................
C	615	87-010-154-080	CAP CHIP 10P	AB..................
C	610	87-010-213-080	C-CAP,S 0.015-50 B	AB..................
C	619	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	617	87-010-408-080	CAP, ELECT 47-50V	AB..................
C	616	87-010-408-080	CAP, ELECT 47-50V	AB..................
C	611	87-010-545-080	CAP, ELECT 0.22-50V	AB..................
C	612	87-010-545-080	CAP, ELECT 0.22-50V	AB..................
C	613	87-010-545-080	CAP, ELECT 0.22-50V	AB..................
C	614	87-010-545-080	CAP, ELECT 0.22-50V	AB..................
C	620	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	635	87-010-178-080	CHIP CAP 1000P	AB..................
C	638	87-010-182-080	C-CAP,S 2200P-50 B	AB..................
C	631	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	661	87-010-178-080	CHIP CAP 1000P	AB..................
C	663	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
CN	202	87-099-719-010	CONN,30P TYK-B(X)	AB..................
CN	671	87-099-210-010	CONN,5P 6216 H	AB..................
D	603	87-020-465-080	DIODE,1SS133 (110MA)	.B..................
D	601	87-A40-466-080	ZENER,MTZJ2.7A	AB..................
D	602	87-A40-466-080	ZENER,MTZJ2.7A	AB..................
IC	601	87-A21-111-040	C-IC,M62495FP	AB..................
J	601	87-A60-354-010	JACK,PIN 2P MSP -242V-05	AB..................
PIN	10	86-NFZ-222-010	PIN,DIA1-6.5	.B..................
PR	601	87-026-689-080	PROTECTOR,1A 60V 491	AB..................
Q	602	87-026-502-080	DTC144TS	AB..................
Q	601	87-026-502-080	DTC144TS	AB..................
Q	603	87-026-502-080	DTC144TS	AB..................
JW	10	87-A90-896-080	F-BEAD, 035600STY7	AB..................
JW	50	87-A90-896-080	F-BEAD, 035600STY7	AB..................
JW	69	87-A90-896-080	F-BEAD, 035600STY7	AB..................
JW	161	87-A90-896-080	F-BEAD, 035600STY7	AB..................
JW	311	87-020-465-080	DIODE,1SS133 (110MA)	....
C	812	87-012-286-080	CAP, U 0.01-25	AB..................
C	814	87-012-286-080	CAP, U 0.01-25	AB..................
C	828	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	829	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	820	87-010-260-080	CAP, ELECT 47-25V	AB..................
C	821	87-012-286-080	CAP, U 0.01-25	AB..................
C	822	87-012-286-080	CAP, U 0.01-25	AB..................
C	823	87-012-286-080	CAP, U 0.01-25	AB..................
C	909	87-012-286-080	CAP, U 0.01-25	AB..................
C	910	87-012-286-080	CAP, U 0.01-25	AB..................
C	942	87-012-172-080	CAPACITOR CHIP U 10P CH	AB..................
C	940	87-012-286-080	CAP, U 0.01-25	AB..................
C	947	87-012-286-080	CAP, U 0.01-25	AB..................
C	949	87-A10-039-080	C-CAP,U 470P-50 J CH	AB..................
C	959	87-010-196-080	CHIP CAPACITOR,0.1-25	.B..................
C	958	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	959	87-010-831-080	C-CAP,U,0.1-16F	A...................
C	952	87-012-286-080	CAP, U 0.01-25	AB..................
C	960	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	963	87-010-196-080	CHIP CAPACITOR,0.1-25	....
C	962	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	961	87-012-170-080	C-CAP,U 8P-50 CH	....
CF	802	82-785-747-010	CF MS2 GHY R	AB..................
CF	802	87-008-261-010	FILTER, SFE10.7MA5-A	....
CF	801	87-008-261-010	FILTER, SFE10.7MA5-A	....
CF	801	87-008-423-010	CERAMIC FILTER, SFE10.7	AB..................
D	944	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	942	87-A40-270-080	C-DIODE,MC2838	AB..................
FFE	801	A8-6ZA-191-130	6ZA-1 FEENM	AB..................
FFE	801	A8-6ZA-192-030	6ZA-1 FEJNM	....
J	801	87-033-241-010	TERMINAL,ANT AJ-2039	AB..................
J	801	87-A60-202-010	TERMINAL,ANT 4P MSP-154V-02	....
L	832	87-005-847-080	COIL,2.2UH(CECS)	AB..................
L	942	87-A50-019-010	COIL,OSC LW(COI)	AB..................
L	941	87-A50-020-010	COIL,ANT LW(COI)	AB..................
L	981	87-NF4-650-010	COIL,AM PACK 4N(TOK)	....
L	981	87-NF4-651-110	COIL,AM PACK2N(TOM)	AB..................
Q	806	87-A30-072-080	C-TR,RT1P 144C	AB..................

ELECTRICAL MAIN PARTS LIST - 6/7

Q	805	89-327-143-080	TR,2SC2714 (0.1W)	AB..................
Q	948	87-A30-257-080	C-TR,2SD1306E	AB..................
Q	947	89-505-434-540	C-FET,2SK543(4/5)	AB..................
Q	951	87-A30-074-080	C-TR,RT1P 141C	AB..................
Q	952	87-A30-257-080	C-TR,2SD1306E	AB..................
TC	942	87-011-164-010	CAPACITOR,TRIMMER 30P	AB..................
C	731	87-012-286-080	CAP, U 0.01-25	AB..................
C	758	87-012-167-080	C-CAP,U 5P-50 CH	AB..................
C	757	87-012-188-080	C-CAP,U 47P-50 CH	AB..................
C	753	87-012-195-080	C-CAP,U 100P-50CH	AB..................
C	752	87-012-282-080	CAP, U 4700P-50	AB..................
C	756	87-012-286-080	CAP, U 0.01-25	AB..................
C	755	87-012-286-080	CAP, U 0.01-25	AB..................
C	761	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	766	87-010-197-080	CAP, CHIP 0.01 DM	AB..................
C	763	87-010-829-080	CAP, U 0.047-16	AB..................
C	768	87-012-286-080	CAP, U 0.01-25	AB..................
C	765	87-012-286-080	CAP, U 0.01-25	AB..................
C	762	87-012-286-080	CAP, U 0.01-25	AB..................
C	764	87-012-337-080	C-CAP,U 56P-50 CH	....
C	769	87-016-513-080	CAP,E 47-35 7L	AB..................
C	774	87-010-263-080	CAP, ELECT 100-10V	AB..................
C	771	87-010-383-080	CAP, ELECT 33-25V	AB..................
C	777	87-010-400-080	CAP, ELECT 0.47-50V	AB..................
C	778	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	779	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	775	87-010-404-080	CAP, ELECT 4.7-50V	AB..................
C	772	87-010-829-080	CAP, U 0.047-16	AB..................
C	770	87-010-829-080	CAP, U 0.047-16	AB..................
C	776	87-012-286-080	CAP, U 0.01-25	AB..................
C	780	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	786	87-010-401-080	CAP, ELECT 1-50V	....
C	785	87-010-401-080	CAP, ELECT 1-50V	....
C	782	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	781	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	786	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	785	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	789	87-012-275-080	C-CAP,U 1200P-50 B	AB..................
C	788	87-012-284-080	CAP, U 6800P-50	AB..................
C	787	87-012-284-080	CAP, U 6800P-50	AB..................
C	784	87-012-286-080	CAP, U 0.01-25	AB..................
C	783	87-012-286-080	CAP, U 0.01-25	AB..................
C	796	87-010-403-080	CAP, ELECT 3.3-50V	AB..................
C	791	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	794	87-010-406-080	CAP, ELECT 22-50	AB..................
C	795	87-010-596-080	CAP, S 0.047-16	AB..................
C	799	87-010-829-080	CAP, U 0.047-16	AB..................
C	793	87-012-273-080	C-CAP,U 820P-50 B	....
C	790	87-012-275-080	C-CAP,U 1200P-50 B	AB..................
C	797	87-012-276-080	CAP, CHIP SS 1500 PBK	AB..................
C	798	87-012-276-080	CAP, CHIP SS 1500 PBK	AB..................
C	793	87-A10-915-080	C-CAP,U 1000P-25 J CH	AB..................
D	771	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	773	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
IC	771	87-A20-913-010	IC,LA1837NL	AB..................
L	771	87-A50-266-010	COIL,FM DET-2N(TOK)	AB..................
L	772	88-CL4-692-010	FLTR,APCFMP-450 (TOK)	....
L	772	88-CL4-693-010	FLTR,PCFAYH-450 (TOK)	AB..................
L	781	87-005-847-080	COIL,2.2UH(CECS)	AB..................
C	709	87-010-322-080	C-CAP,S 100P-50 CH	....
C	701	87-010-381-080	CAP, ELECT 330-16V	AB..................
C	702	87-010-404-080	CAP, ELECT 4.7-50V	AB..................
C	709	87-012-195-080	C-CAP,U 100P-50CH	AB..................
C	704	87-012-286-080	CAP, U 0.01-25	AB..................
C	703	87-012-286-080	CAP, U 0.01-25	AB..................
C	711	87-010-263-080	CAP, ELECT 100-10V	AB..................
C	712	87-010-831-080	C-CAP,U,0.1-16F	AB..................
C	718	87-012-179-080	C-CAP,U 20P-50 CH	....
C	715	87-012-195-080	C-CAP,U 100P-50CH	AB..................
C	714	87-012-286-080	CAP, U 0.01-25	AB..................
C	719	87-012-286-080	CAP, U 0.01-25	AB..................
C	713	87-012-286-080	CAP, U 0.01-25	AB..................
C	717	87-012-286-080	CAP, U 0.01-25	AB..................
C	712	87-015-785-080	CHIP CAPACITOR, 0.1FZ-25Z	....
C	727	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	728	87-010-248-080	CAP, ELECT 220-10V	AB..................
C	721	87-012-176-080	CAP 15P	AB..................
C	722	87-012-176-080	CAP 15P	AB..................
C	720	87-012-195-080	C-CAP,U 100P-50CH	AB..................
C	723	87-012-274-080	CHIP CAP,U 1000P-50B	AB..................
C	725	87-012-274-080	CHIP CAP,U 1000P-50B	....
C	729	87-012-274-080	CHIP CAP,U 1000P-50B	AB..................
C	725	87-018-131-080	CAP, CER 1000P-50V	AB..................
D	702	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	722	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	721	87-A40-234-080	ZENER,MTZJ5.6A	AB..................
IC	721	87-070-127-110	IC,LC72131 D	AB..................
Q	711	87-A30-196-080	TR,2SC4115SRS	AB..................
X	721	87-A70-061-010	VIB,XTAL 4.500MHZ CSA-309	AB..................
C	872	87-010-400-080	CAP, ELECT 0.47-50V	....
C	873	87-010-404-080	CAP, ELECT 4.7-50V	....
C	877	87-012-278-080	C-CAP,U 2200P-50 B	....

ELECTRICAL MAIN PARTS LIST - 7/7

C	878	87-012-278-080	C-CAP,U 2200P-50 B	....
C	889	87-010-248-080	CAP, ELECT 220-10V	....
C	884	87-010-260-080	CAP, ELECT 47-25V	....
C	883	87-010-404-080	CAP, ELECT 4.7-50V	....
C	886	87-010-545-080	CAP, ELECT 0.22-50V	....
C	885	87-010-545-080	CAP, ELECT 0.22-50V	....
C	888	87-010-787-080	CAP, U 0.022-25	....
C	881	87-012-141-080	CHIP-CAPACITOR,0.22-16F	....
C	882	87-012-172-080	CAPACITOR CHIP U 10P CH	....
C	887	87-012-286-080	CAP, U 0.01-25	....
D	886	87-020-465-080	DIODE,1SS133 (110MA)	....
IC	871	87-070-060-040	IC,TA2040AF	....
Q	873	87-026-226-080	CHIP-TR,DTA143EK	....
X	891	87-030-394-010	VIB,CER CSA3.6MGF228	....
C	859	87-012-286-080	CAP, U 0.01-25	.B..................
C	865	87-010-196-080	CHIP CAPACITOR,0.1-25	.B..................
C	866	87-010-405-080	CAP, ELECT 10-50V	.B..................
C	864	87-010-405-080	CAP, ELECT 10-50V	.B..................
C	869	87-012-180-080	C-CAP,U 22P-50 CH	.B..................
C	868	87-012-184-080	C-CAP,U 33P-50 CH	.B..................
C	862	87-012-199-080	CAP 220P	.B..................
C	861	87-012-199-080	CAP 220P	.B..................
C	863	87-012-270-080	CAP, U 470P-50	.B..................
C	867	87-012-286-080	CAP, U 0.01-25	.B..................
IC	851	87-A20-440-040	C-IC,BU1920FS	.B..................
L	851	87-005-847-080	COIL,2.2UH(CECS)	.B..................
Q	853	87-A30-076-080	C-TR,2SC3052F	.B..................
X	851	87-A70-091-010	VIB,XTAL 4.332MHZ CSA-309	.B..................
C	526	87-010-112-080	CAP, ELECT 100-16V	AB..................
C	527	87-010-196-080	CHIP CAPACITOR,0.1-25	AB..................
C	528	87-010-374-080	CAP, ELECT 47-10V	AB..................
C	529	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	530	87-010-401-080	CAP, ELECT 1-50V	AB..................
C	532	87-010-402-080	CAP, ELECT 2.2-50V	AB..................
C	531	87-010-405-080	CAP, ELECT 10-50V	AB..................
C	537	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	538	87-010-546-080	CAP, ELECT 0.33-50V	AB..................
C	533	87-A10-999-080	CAP,M 0.01-50 J DE	AB..................
C	535	87-A10-999-080	CAP,M 0.01-50 J DE	AB..................
C	534	87-A10-999-080	CAP,M 0.01-50 J DE	AB..................
C	536	87-A10-999-080	CAP,M 0.01-50 J DE	AB..................
D	501	87-A40-523-080	ZENER,MTZJ9.1B	AB..................
IC	501	87-A20-946-040	C-IC,MM1434XF	AB..................
C	101	87-010-387-080	CAP,E 470-25 SME	AB..................
CN	101	87-099-408-010	CONN,8P EH V WHT	AB..................
D	104	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	108	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	107	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	103	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	105	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	101	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
D	102	87-020-465-080	DIODE,1SS133 (110MA)	AB..................
PR	101	87-026-681-080	PROTECTOR,5A 60V 491	AB..................
PR	102	87-026-681-080	PROTECTOR,5A 60V 491	AB..................
PR	104	87-A91-276-080	FUSE,125MA 125V F 251	....
PT	102	8Z-NF8-660-010	PT,SUB ZNF-8(D)	....
PT	102	8Z-NF8-662-010	PT,SUB ZNF-8(E)	AB..................
Q	101	87-026-610-080	TR,KTC3198GR	AB..................
RY	102	87-A90-976-010	RELAY,AC12V SDT-S-112LMR	AB..................
T	101	87-A60-317-010	TERMINAL, 1P MSC	AB..................
T	102	87-A60-317-010	TERMINAL, 1P MSC	AB..................

MECHANICAL PARTS LIST - 1/1

NOTE: The characters in the suffix column indicate the part usage.

K ......................XX..................................A...................

EZ .....................XX...................................B..................

REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	8Z-CL7-026-010		CABI,TOP	AB..................
	8Z-CL7-036-110		PANEL,TRAY	AB..................
	8Z-CLH-001-010		CABI,FR EZ	.B..................
	8Z-CLH-002-010		CABI,FR D	....
	8Z-CLH-003-010		CABI,FR K	A...................
	8Z-CLH-011-010		PANEL,REAR K	....
	8Z-CLH-012-010		PANEL,REAR EZ	....
	8Z-CLH-014-010		PANEL,REAR D	....
	8Z-CLH-015-010		PANEL,REAR KSC	A...................
	8Z-CLH-016-010		PANEL,REAR EZSC	.B..................
	8Z-CLH-017-010		PANEL,REAR SC	....
	8Z-CLH-031-010		PANEL,BOX-CASS D	....
	8Z-CLH-032-010		PANEL,BOX-CASS	AB..................
	8Z-CLH-041-010		PANEL,FR D	....
	8Z-CLH-042-010		PANEL,FR	AB..................
	8Z-CL7-060-010		KEY,POWER ASSY	AB..................
	8Z-CL7-062-010		KEY,OPEN	AB..................
	8Z-CL7-063-010		KEY,FUNC ASSY	AB..................
	8Z-CL7-065-010		KEY,CONT ASSY	AB..................
	8Z-CL7-067-010		KEY,GEQ	AB..................
	8Z-CL7-069-010		KEY,Q-SOUND	AB..................
	8Z-CL7-070-010		KEY,ECO	AB..................
	8Z-CL7-081-110		KNOB,RTRY VOL	AB..................
	8Z-CLH-062-010		KEY,OPEN D	....
	8Z-CLH-063-010		KEY,FUNC ASSY D	....
	8Z-CLH-064-010		KEY,FUNC D	....
	87-B00-002-010		BADGE,AIWA 30 ABS SIL	AB..................
	8Z-CL7-051-010		WINDOW,DISP	A...................
	8Z-CL7-052-010		WINDOW,CASS	AB..................
	8Z-CL7-055-010		WINDOW,DISP EZ	.B..................
	8Z-CL7-085-010		LENS,RC	AB..................
	8Z-CLH-051-010		WINDOW,DISP D	....
	82-NF5-228-010		SPR-C,LOCK	AB..................
	82-NF5-229-010		PLATE,LOCK	AB..................
	82-ZM1-264-010		LVR,EJECT R	AB..................
	85-CE6-217-010		HLDR, LOCK	AB..................
	87-NF8-220-010		DMPR,150	AB..................
	88-CL4-215-010		CUSH,FOOT FR	AB..................
	88-CL4-216-010		CUSH,FOOT REAR	AB..................
	88-CL4-220-010		SPR-T,CASS	AB..................
	8Z-CL7-201-110		FRAME,BOX-CASS	AB..................
	8Z-CL7-205-110		HLDR,CD	AB..................
	8Z-CL7-214-010		HLDR,TRANS LH	AB..................
	87-067-703-010		TAPPING SCREW, BVT2+3-10	AB..................
	87-067-758-010		BVT2+3-12 W/O SLOT	A...................
	87-571-032-410		VIT+2-3	AB..................
*	87-B10-230-010		BVT2+3-10 W/O SLOT SILVER CR	AB..................
*	87-B10-231-010		QT1+3-12 SILVER CR	AB..................
*	87-B10-250-010		BVT2+3-12 W/O SLOT CR SILVER	AB..................
	84-ZG1-245-210		CAP,OPTICAL	....
	87-050-098-010		AC CODE ASSY,D	....
	87-050-108-010		AC CORD ASSY,K 3PH	A...................
	87-067-703-010		TAPPING SCREW, BVT2+3-10	AB..................
	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI	.B..................
	87-A80-108-010		AC CORD ASSY,K BLK 3P	....
	88-905-231-110		FF-CABLE, 5P 1.25 230MM	AB..................
	88-905-251-110		FF-CABLE 5P 1.25	AB..................
	88-906-261-110		FF-CABLE,6P 1.25 260MM	AB..................
	88-910-261-210		FF-CABLE, 10P 1.25 260MM	AB..................
	8Z-CL7-704-010		FF-CABLE, 16P 1.0	AB..................
C 803	87-A10-207-080		CAP,TCS 0.01-50KBUP050	A...................
CN 301	88-CL4-701-010		CONN ASSY,7P RPEH	AB..................
PT 101	8Z-CL7-641-010		PT,D	....
PT 101	8Z-CL7-643-010		PT,EZ	AB..................
	87-067-579-010		TAPPING SCREW, BVT2+3-8	AB..................
W 101	8Z-CL7-652-110		CONN ASSY,8P ZCL7	AB..................

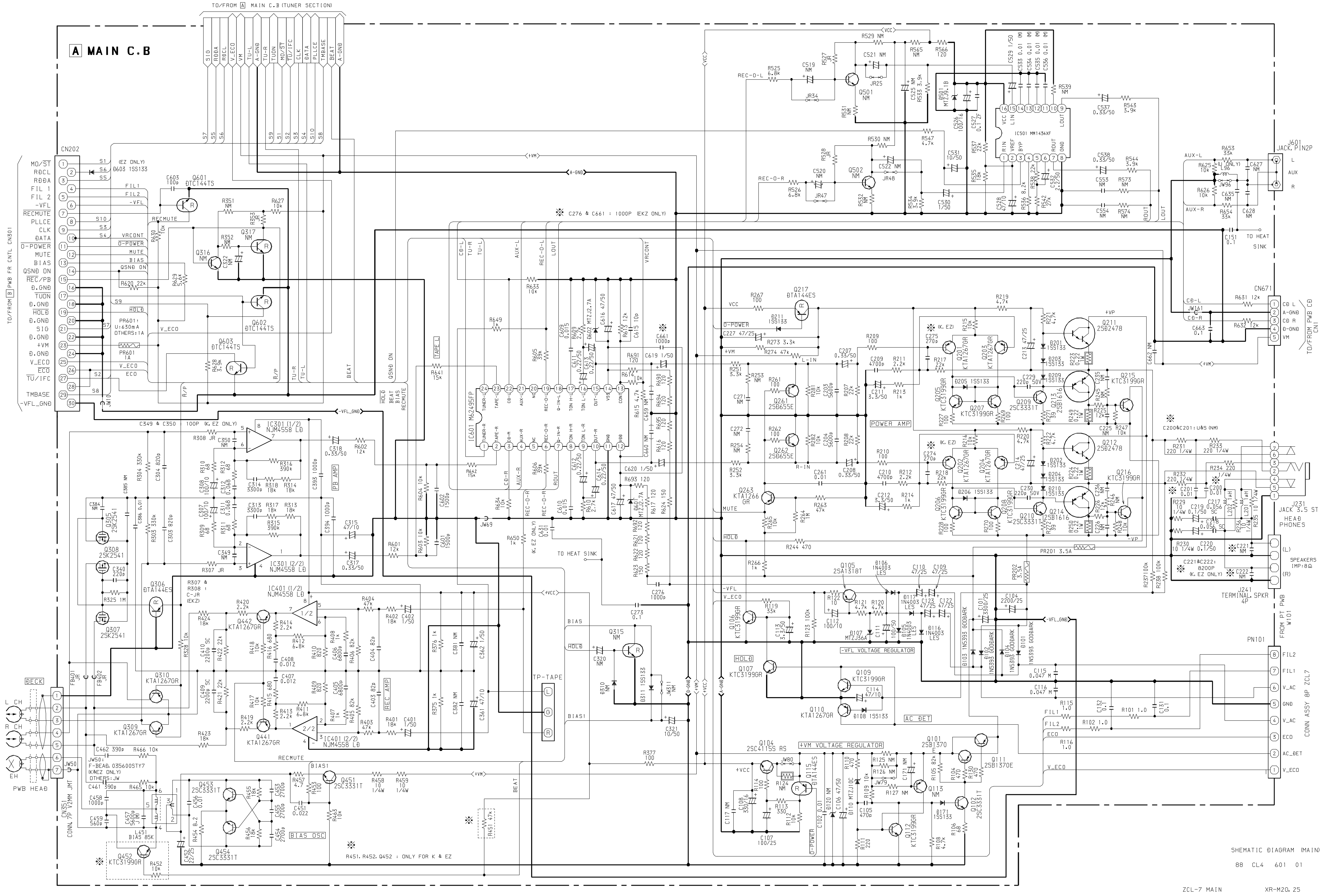
ACCESSORIES / PACKAGE LIST - 1/1

NOTE: The characters in the suffix column indicate the part usage.

K ......................XX..................................A...................
EZ .....................XX...................................B..................

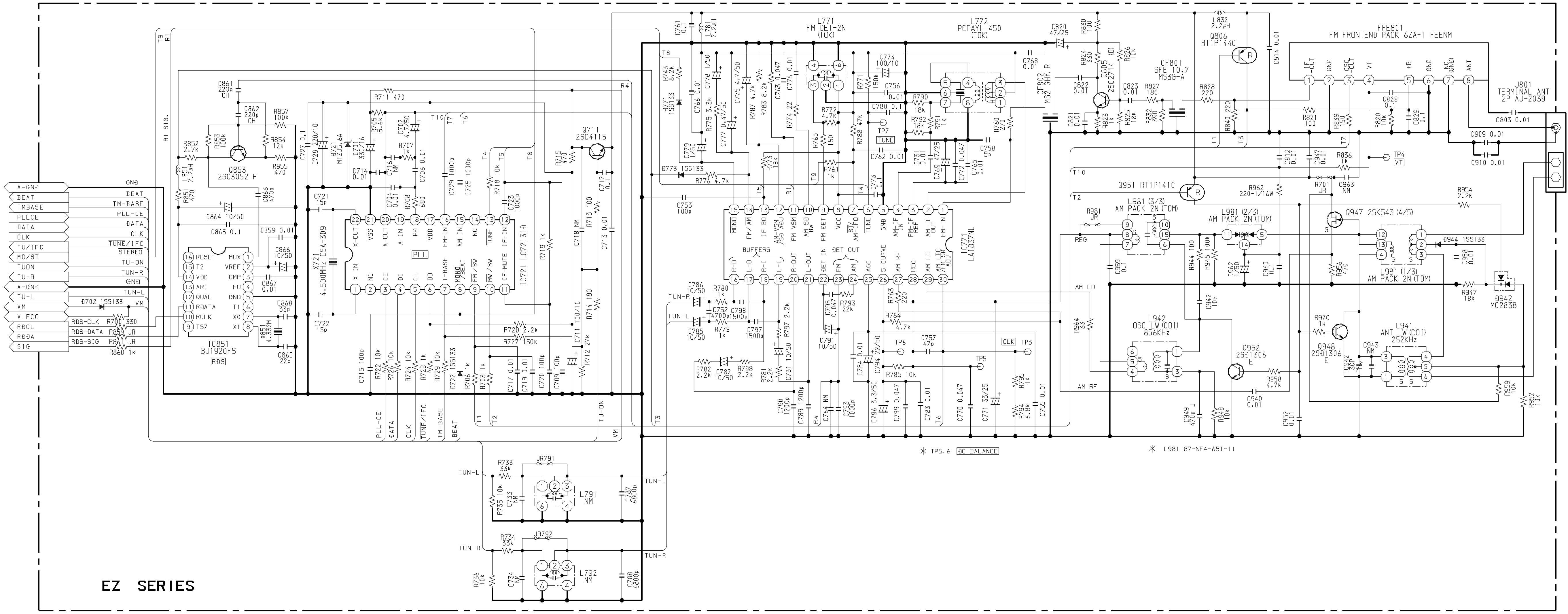
REF.NO		PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
		8Z-CLH-901-010		IB,K(E)-M11 -M	....
		8Z-CLH-902-010		IB,E(9L)-M12 -M	....
		8Z-CLH-903-010		IB,K(E)-M11- C	A...................
		8Z-CLH-904-010		IB,E(9L)-M12 -C	.B..................
		8Z-CLH-906-010		IB,D(J) -M	....
		8Z-CLH-908-010		IB,D(J) -C	....
		87-CL4-762-010		SPKR CER TWEETER	AB..................
		87-CL4-764-010		CORD SPKR	AB..................
SP	1	8Z-CL7-764-010		SPKR, WOOFER 16OHM	AB..................
		87-067-758-010		BVT2+3-12 W/O SLOT	AB..................
		87-761-097-410		VFT2+3-10 GLD	AB..................
		88-CL4-216-010		CUSH,FOOT REAR	AB..................
		8Z-CL7-107-010		BADGE,AIWA SILVER	AB..................
SP	0	8Z-CL7-101-010		SPKR,PANEL FR	AB..................
SP	0	8Z-CL7-103-010		SPKR,GRILL FRAME	AB..................
		87-006-225-010		AM LOOP ANT NC2	....
		87-043-115-010		ANT,FEEDER FM	....
		87-A90-030-010		ANT,LOOP AM-NC C	AB..................
		87-A90-118-010		ANT,WIRE FM (Z)	AB..................
		8Z-CK4-951-010		RC UNIT,RC-ZAT03	....
		8Z-CK4-952-010		RC UNIT,RC-ZAT04	....
		8Z-CK4-961-010		RC UNIT,RC-ZAT03 (VS)	....
		8Z-CK4-962-010		RC UNIT,RC-ZAT04 (VS)	AB..................

SCHEMATIC DIAGRAM – 1 (MAIN 1/2)

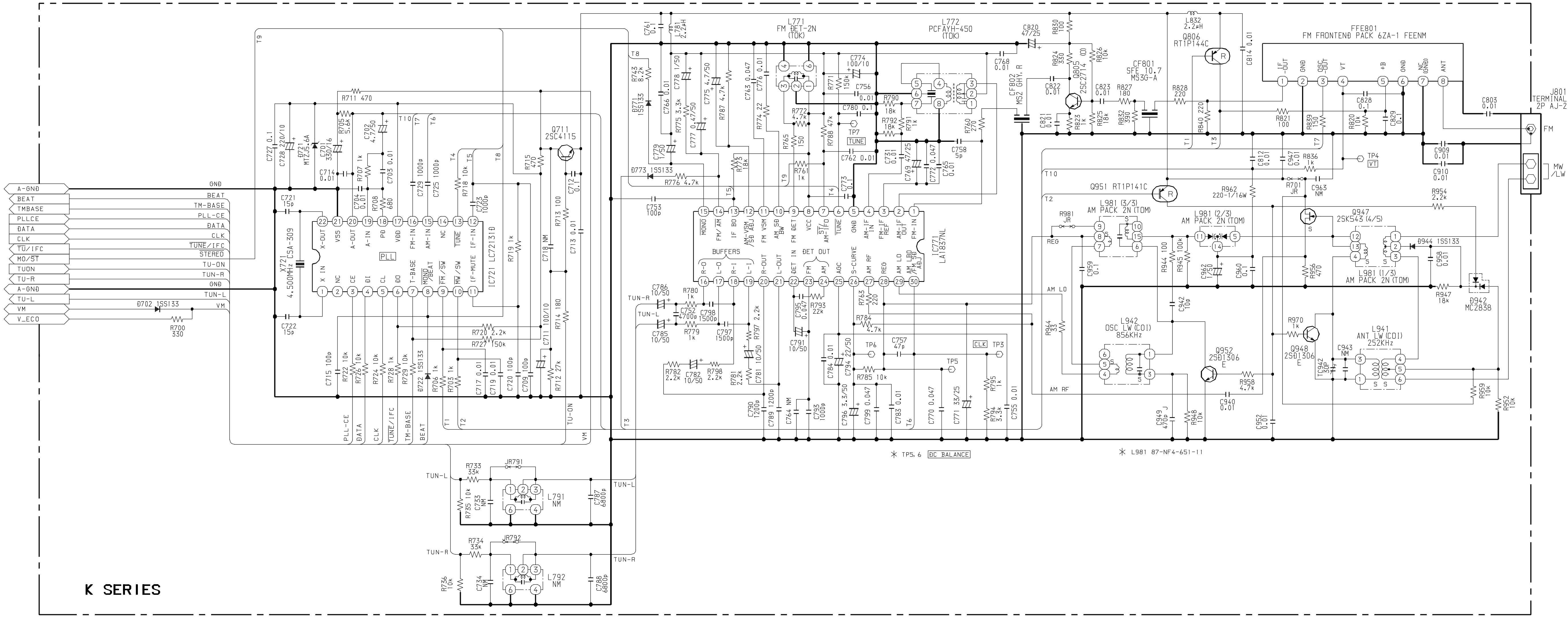


TO/FROM A MAIN C.B (TUNER SECTION)
A MAIN C.B
CN202
TO/FROM B PWB FR CNTL CN301
MO/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLLCE
CLK
DATA
D-POWER
MUTE
BIAS
QSND ON
REC/PB
D.GND
TUON
HOLD
SIG
+VM
V_ECO
ECO
TU/IFC
TMBASE
-VFL_GND
Q601 DTC144TS
Q602 DTC144TS
Q603 DTC144TS
Q316
Q317
IC301 (1/2) NJM4558 LD
IC301 (2/2) NJM4558 LD
PB AMP
Q308 2SK2541
Q307 2SK2541
Q306 DTA144ES
IC401 (1/2) NJM4558 LD
IC401 (2/2) NJM4558 LD
REC AMP
Q442 KTA1267GR
Q441 KTA1267GR
Q310 KTA1267GR
Q309 KTA1267GR
DECK
L CH
R CH
EH
PWB HEAD
CN351 CONN.7P V2MM JMT
BIAS OSC
Q453 2SC3331T
Q454 2SC3331T
Q451 2SC3331T
Q452 KTC3199GR
R451, R452, Q452 : ONLY FOR K & EZ
IC601 M62495FP
TP-TAPE
Q315
TO HEAT SINK
C276 & C661 : 1000P (EKZ ONLY)
Q501
Q502
IC501 MM1434XF
J601 JACK, PIN2P
AUX
CN671
TO/FROM PWB CD CN1
Q217 DTA144ES
POWER AMP
Q211 2SD2478
Q212 2SD2478
Q215 KTC3199GR
Q216 KTC3199GR
Q213 2SB1616
Q214 2SB1616
Q261 2SD655E
Q262 2SD655E
Q263 KTA1266 GR
PR201 3.5A
PR202 3.5A
C200&C201 : U&S (NM)
J231 JACK 3.5 ST
HEAD PHONES
SPEAKERS IMP:8Ω
J241 TERMINAL SPKR 4P
Q105 2SA1318T
Q106 KTC3199GR
-VFL VOLTAGE REGULATOR
Q107 KTC3199GR
Q109 KTC3199GR
Q110 KTA1267GR
AC DET
+VM VOLTAGE REGULATOR
Q104 2SC4115S RS
Q101 2SB1370
Q111 2SB1370E
Q113
Q102 2SC3331T
Q112 KTC3199GR
Q115 DTA144ES
PN101
FROM PT PWB W101
CONN ASSY 8P ZCL7
FIL2
FIL1
V_AC
GND
ECO
AC_DET
V_ECO
SHEMATIC DIAGRAM (MAIN)
88 CL4 601 01
ZCL-7 MAIN
XR-M20.25

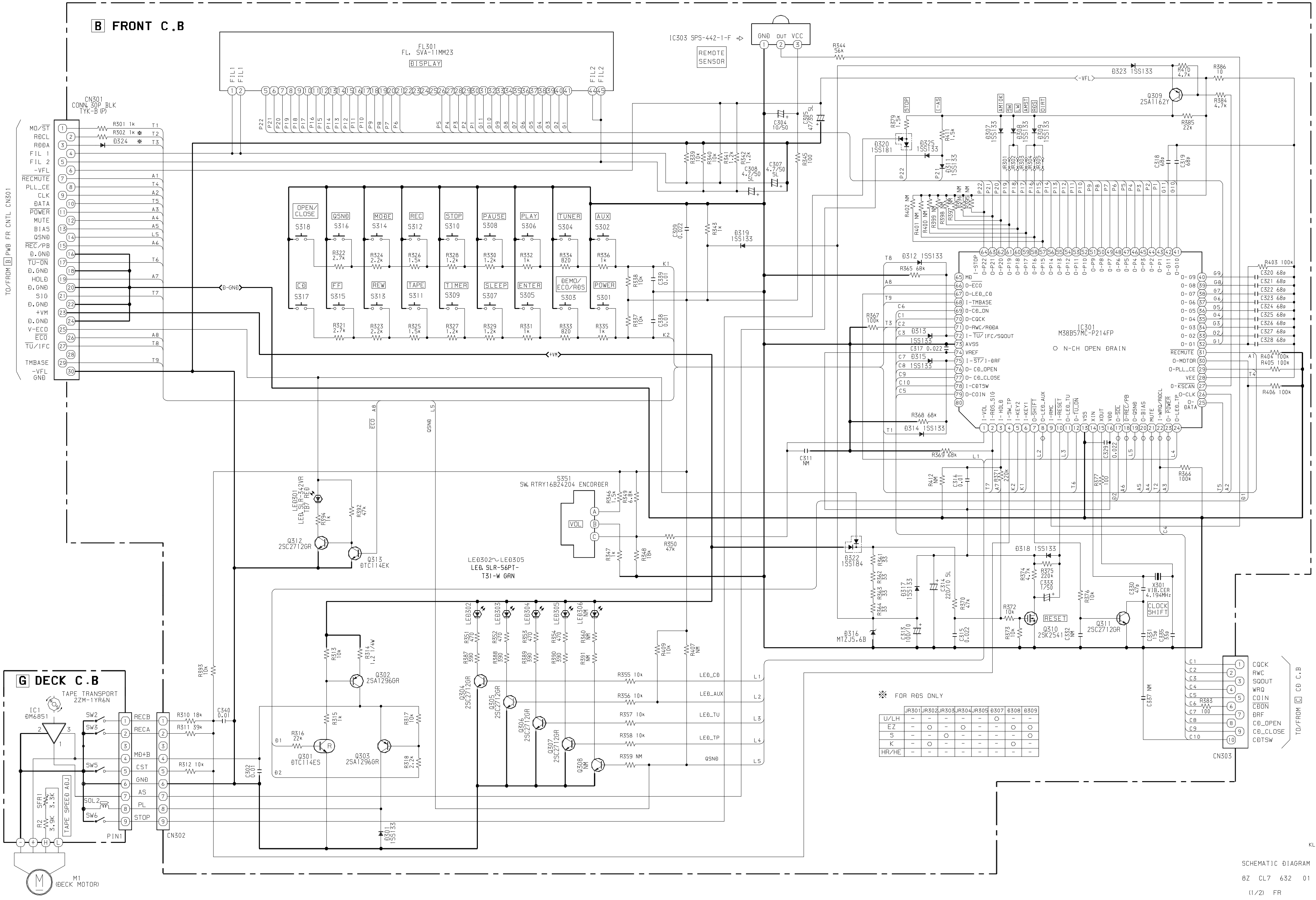
SCHEMATIC DIAGRAM – 2 (MAIN 2/2 : TUNER SECTION) <EZ>


A-GND
BEAT
TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
RDCL
RDDA
SIG
IC851 BU1920FS
RDS
Q853 2SC3052 F
X721 4.500MHz CSA-309
IC721 LC72131D
PLL
Q711 2SC4115
L771 FM DET-2N (TOK)
L772 PCFAYH-450 (TOK)
IC771 LA1837NL
CF801 SFE 10.7 MS3G-A
CF802 MS2 6HY. R
Q806 RT1P144C
Q805 2SC2714 (O)
FFE801 FM FRONTEND PACK 6ZA-1 FEENM
J801 TERMINAL ANT 2P AJ-2039
FM
MW /LW
Q951 RT1P141C
L981 (3/3) AM PACK 2N (TOM)
L981 (2/3) AM PACK 2N (TOM)
L981 (1/3) AM PACK 2N (TOM)
Q947 2SK543 (4/5)
D944 1SS133
D942 MC2838
L942 OSC LW (COI) 856KHz
L941 ANT LW (COI) 252KHz
Q952 2SD1306 E
Q948 2SD1306 E
L791 NM
L792 NM
TUN-L
TUN-R
EZ SERIES
* TP5, 6 DC BALANCE
* L981 87-NF4-651-11

SCHEMATIC DIAGRAM – 3 (MAIN 2/2 : TUNER SECTION) <K>


A-GND
BEAT
TMBASE
PLLCE
DATA
CLK
TU/IFC
MO/ST
TUON
TU-R
A-GND
TU-L
VM
V_ECO
GND
TM-BASE
PLL-CE
STEREO
TU-ON
D702 1SS133
R700 330
X721 4.500MHz CSA-309
IC721 LC72131D
PLL
Q711 2SC4115
IC771 LA1837NL
BUFFERS
DET OUT
L771 FM DET-2N (TOK)
L772 PCFAYH-450 (TOK)
CF802 MS2 GHY. R
CF801 SFE 10.7 MS3G-A
Q805 2SC2714 (O)
Q806 RT1P144C
L832 2.2μH
FFE801 FM FRONTEND PACK 6ZA-1 FEENM
J801 TERMINAL ANT 2P AJ-2039
FM
MW /LW
Q951 RT1P141C
L981 (3/3) AM PACK 2N (TOM)
L981 (2/3) AM PACK 2N (TOM)
L981 (1/3) AM PACK 2N (TOM)
Q947 2SK543 (4/5)
D944 1SS133
D942 MC2838
L942 OSC LW (CO1) 856KHz
L941 ANT LW (CO1) 252KHz
Q952 2SD1306
Q948 2SD1306
TP3
TP4
TP5
TP6
TP7
TUNE
VT
CLK
REG
AM LO
AM RF
L791 NM
L792 NM
JR791
JR792
TUN-L
TUN-R
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
* TP5, 6 DC BALANCE
* L981 87-NF4-651-11
K SERIES

SCHEMATIC DIAGRAM – 4 (FRONT)


B FRONT C.B
FL301
FL. SVA-11MM23
DISPLAY
IC303 SPS-442-1-F
GND OUT VCC
REMOTE SENSOR
CN301
CONN 30P BLK
TYK-B (P)
TO/FROM B PWB FR CNTL CN301
MD/ST
RDCL
RDDA
FIL 1
FIL 2
-VFL
RECMUTE
PLL_CE
CLK
DATA
POWER
MUTE
BIAS
QSND
REC/PB
D.GND
TU-ON
D.GND
HOLD
D.GND
SIG
D.GND
+VM
D.GND
V-ECO
ECO
TU/IFC
TMBASE
-VFL
GND
OPEN/CLOSE S318
QSND S316
MODE S314
REC S312
STOP S310
PAUSE S308
PLAY S306
TUNER S304
AUX S302
CD S317
FF S315
REW S313
TAPE S311
TIMER S309
SLEEP S307
ENTER S305
DEMO/ECO/RDS S303
POWER S301
IC301
M38B57MC-P214FP
N-CH OPEN DRAIN
Q309 2SA1162Y
S351
SW.RTRY16B24204 ENCORDER
VOL
LED301 SLR-342VR RED
Q312 2SC2712GR
Q313 DTC114EK
LED302~LED305
LED SLR-56PT-T31-W GRN
Q302 2SA1296GR
Q301 DTC114ES
Q303 2SA1296GR
Q304 2SC2712GR
Q305 2SC2712GR
Q306 2SC2712GR
Q307 2SC2712GR
Q308 NM
D322 1SS184
D316 MTZJ5.6B
RESET
Q310 2SK2541
Q311 2SC2712GR
X301 VIB.CER 4.194MHz
CLOCK SHIFT
CN303
CQCK
RWC
SQOUT
WRQ
COIN
CDON
DRF
CD_OPEN
CD_CLOSE
CDTSW
TO/FROM C CD C.B
G DECK C.B
TAPE TRANSPORT
2ZM-1YR6N
IC1
DM6851
SW2
SW3
SW5
SOL2
SW6
SFR1 3.3K
R2 3.9K
TAPE SPEED ADJ
PIN1
RECB
RECA
MD+B
CST
GND
AS
PL
STOP
CN302
M1
(DECK MOTOR)
LED_CD
LED_AUX
LED_TU
LED_TP
QSND
B-ZCL-7FRCD-RND.FR

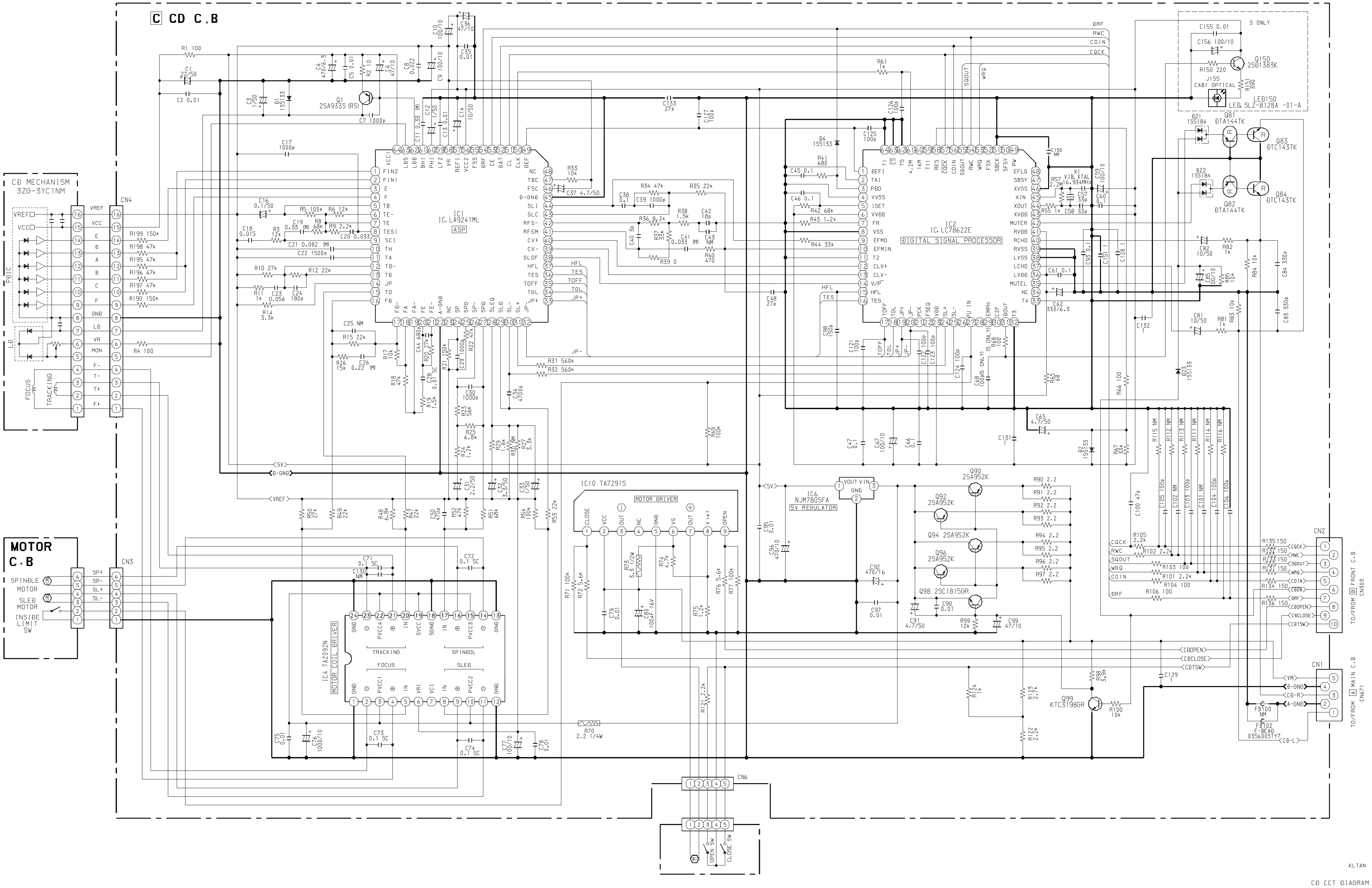
※ FOR RDS ONLY

	JR301	JR302	JR303	JR304	JR305	D307	D308	D309
U/LH	–	–	–	–	–	○	–	–
EZ	–	○	–	○	–	–	○	○
S	–	–	○	–	–	–	–	○
K	–	○	–	–	–	–	○	–
HR/HE	–	–	–	–	–	–	–	–

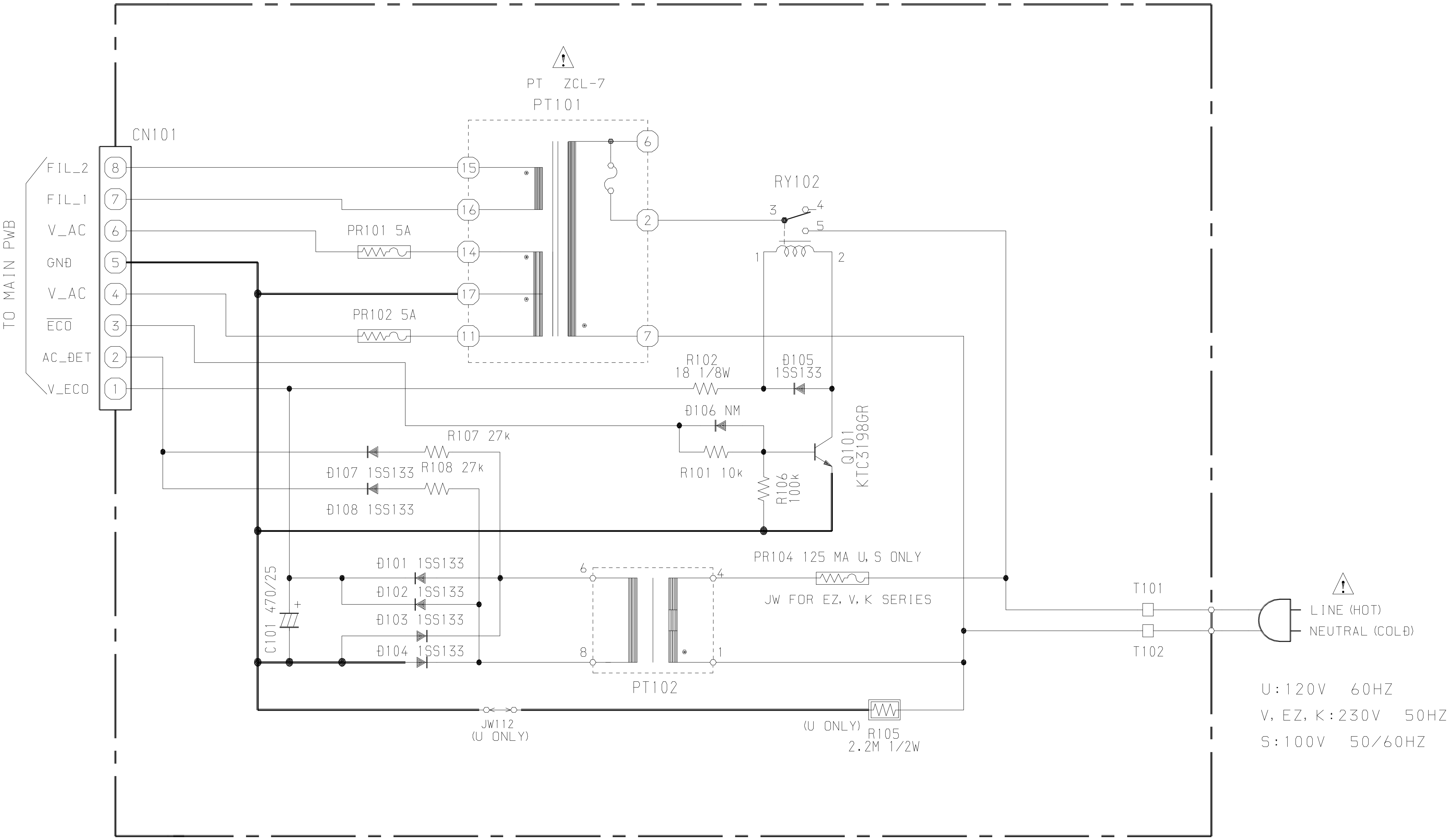
KLTAN

SCHEMATIC DIAGRAM (FR)
8Z CL7 632 01
(1/2) FR
ZCL-7/17 XR-M22/33
15 10 98

SCHEMATIC DIAGRAM – 5 (CD)


C CD C.B
CD MECHANISM
3ZG-3YC1NM
PDIC
LD
FOCUS
TRACKING
CN4
IC1
IC LA9241ML
ASP
IC2
IC LC78622E
DIGITAL SIGNAL PROCESSOR
Q1
2SA933S (RS)
X1
VIB XTAL
16.934MHz
5 ONLY
Q150
2SD1383K
J155
CABI OPTICAL
LED150
LED SLZ-8128A -01-A
Q81
DTA144TK
Q82
DTA144TK
Q83
DTC143TK
Q84
DTC143TK
MOTOR
C.B
SPINDLE
MOTOR
SLED
MOTOR
INSIDE
LIMIT
SW
CN3
IC4 TA2092N
MOTOR COIL DRIVER
TRACKING
FOCUS
SPINDOL
SLED
IC10 TA7291S
MOTOR DRIVER
IC6
NJM7805FA
5V REGULATOR
Q90
2SA952K
Q92
2SA952K
Q94 2SA952K
Q96
2SA952K
Q98 2SC1815GR
Q99
KTC3198GR
CN2
TO/FROM B FRONT C.B
CN303
CN1
TO/FROM A MAIN C.B
CN671
FB100
NM
FB102
F-BEAD
035600STY7
CN6
OPEN SW
CLOSE SW
<5V>
<D-GND>
<VREF>
<CDOPEN>
<CDCLOSE>
<CDTSW>
<VM>
<D-GND>
<CD-R>
<A-GND>
<CD-L>
KLTAN
CD CCT DIAGRAM

SCHEMATIC DIAGRAM – 6 (PT)


PT ZCL-7
PT101
CN101
TO MAIN PWB
FIL_2
FIL_1
V_AC
GND
V_AC
ECO
AC_DET
V_ECO
8
7
6
5
4
3
2
1
15
16
14
17
11
6
2
7
PR101 5A
PR102 5A
RY102
3
4
5
1
2
R102
18 1/8W
D105
1SS133
D106 NM
R101 10k
R106
100k
Q101
KTC3198GR
R107 27k
R108 27k
D107 1SS133
D108 1SS133
C101 470/25
D101 1SS133
D102 1SS133
D103 1SS133
D104 1SS133
PR104 125 MA U, S ONLY
JW FOR EZ, V, K SERIES
6
4
8
1
PT102
T101
T102
LINE (HOT)
NEUTRAL (COLD)
JW112
(U ONLY)
(U ONLY)
R105
2.2M 1/2W
U:120V 60HZ
V, EZ, K:230V 50HZ
S:100V 50/60HZ

サービス技術ニュース	
番号	連絡内容
G－　　－	
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9420025

Tokyo Japan

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